## Studies in South American: Native Languages.

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(Read before the American Philosophical Society, February 5, 1892.)

## Introductory.

It is not too much to say that the languages of the native tribes of South America are the least known of any on the globe. The problems they present in their grammatical character and affinities remain the furthest from solution, and the materials to undertake such a task are the scantiest from any equal area on the earth's surface. In spite of the labors of such earnest workers as Von den Steinen, Ehrenreich, Adam, Ernst, Darapsky, Middendorff and others, there are numerous tongues of which we know absolutely nothing, or have but bare and imperfect vocabularies.

In the present series of studies I present a variety of material from either unpublished or rare works, accompanied by such suggestions as to its character and relations as have occurred to me in its preparation, and by some observations on the ethnography of the tribes mentioned. As I am convinced that the only ethnographic classification possible of the native tribes of America is that based on language, I do not hesitate to apply this whenever possible.

## I.

## THE TACANA GROUP.

In my work on The American Race,* I offered the following classification of this group:

Tacana Linguistic Stock.

| Araonas, | Isuianas, | Pukapakaris, | Tumupasas, |
| :--- | :--- | :--- | :--- |
| Atenes, | Lecos, | Sapiboconas, | Tuyumiris. |
| Cavinas, | Maracanis, | Tacanas, |  |
| Equaris, | Maropas, | Toromonas, |  |

From this list we must strike out the Atenes or Atenianos and Lecos, as I shall show that these spoke a tongue nowise akin to the

[^0]Tacana, in spite of some assertions to the contrary by Spanish writers.

Other tribes which should probably be added to this list, as they are located on old maps within Tacana territory and have Tacana names, are:

Carangues, on left bank of Rio Tarabeni.
Chumanos, north of Lake Roguaguado.
Poromonas, on the lower Rio Beni (or Poro).
Samachuanes, on Rio Coroico.
Uchupiamonas, oll the Rio Uchupiamona.
Yubamonas, on the Rio Yuba.
The termination monas to several of these names is the Spanish plural form of the Tac. manu, river, the tribes being named from the streams along which they lived.

In addition to the above I have found that the tribe known as "Guarizas" is to be included among the Tacanas. A series of texts in their language, comprising the Pater, the Ave and the Credo, was found among the papers of Cardinal Meizofanti, and has been published by Prof. Emilio Teza in his Saggi inediti di Lingue Americane (Pisa, 1868). The learned editor states that all his endeavors to identify this language, or to ascertain the location or affinities of the tribe, had been fruitless. A comparison of the Guariza Pater with that in the Tacana, both of which I give on : later page, will prove the very close relationship of the two tribes.

D'Orbigny asserts that "Tacana" is not the name of a tribe, but the name of the language. It is called by Spanish writers of the last century the "Maracani,"* which is apparently not the same as the Macarañi of the mission of Santiago among the Chiquitos.

The earliest missionary explorer of the Rio Beni, Fray Francisco de Rosario, wrote a report in 1677 , in which he mentions a number of tribes, now extinct, among them the Hucumanos and the Torococyes, whose names indicate them to have belonged to the Tracana stock. $\dagger$

## Location and Number.

The general location of the Tacana group may be described as along the eastern slope of the Cordillera, where it descends to the

[^1]valley of the river Beni (otherwise called the Rio Poro, the Rio Pilcopata and the Rio Madre de Dios), and in the valley of the latter on both banks, between South lat. $12^{\circ}$ and $15^{\circ}$. At present the Tacana dialect proper is spoken in the towns of Tumupasa and Isiamas; the Araona by the Araonas, who dwell on the banks of the Beni and on those of its western tributaries, known as the Manuripi, Tahuamanu and Uaicomanu; the Cavineño is confined to the mission of Cavinas; the Maropa to the Maropes, in and near the Pueblo de los Reyes, on the right bank of the Beni, about $12^{\circ} 30^{\prime} \mathrm{S}$. lat., while the Sapis or Sapiboconas appear to have been the most eastern branch of the stock, as they were attached to the mission of the Moxos in the province of that name on the Rio Mamore.

In 1831 the total number of persons speaking the dialects of this stock was about 6000 (D'Orbigny). The majority of these are nominally Christians and have fixed habitations; but the Toromonas, who dwell between the rivers Madidi and Beni, in $12^{\circ}-13^{\circ}$ South lat., are still uncivilized and heathens; so, also, are the Araonas, who are stated to be cannibals and idol worshipers. Their idols are geometrically shaped pieces of polished wood and stone. Their chief deity is "Baba Buada," whom they identify with the wind, vutana, and whose home is in the air. He is said to live towards the south and to be the creator of heaven and earth. The general term for divinity is edutzi, and there is a zia edutzi, god of maize ; an agave edutzi, god of health, etc. Each edutzi has his own yanacona, or priest, to superintend the proper rites.*

## Loan Words.

The Tacana-speaking tribes have for generations adjoined on the west the once powerful and cultivated Aymaras, and on the north the populous herds of the Panos. The consequences on their tongue have been quite marked. A number of words have been borrowed from both sources; but they are not so frequent nor of such a character as to authorize the supposition of an original unity with either of the stocks named. I give a list of some of these :

Identities in Aymara and Tacana.

|  | aymara. | Tacana. |
| :--- | :---: | :---: |
| Arm, | ampara, | embai, M. |

[^2]|  | Armara. | Tacana. |
| :--- | :--- | :--- |
| Boat, | huampu, | cuambá, M. |
| Cold, | t'aarata, | bruada, T. |
| Earth (patria), | marca, | mechi, S. |
| Green, | chojna, | china, T. |
| Heaven, | alakhpacha, | evacua pacha, T. |
| House, | utax, | etai, M. |
| Island, | luatta, | eda-pupu, T. |
| Lightning, | llipikh-llipikh, | jili-jili, M. |
| Man, | chacha, | drejà, M. |
| Meat (flesh, body), | aycha, | aicha, T. |
| Morning (Span. mañana), | maylla, | maita, M. |
| Night, | aruma, | apume, M. |
| Old, | וchachi, | esi, M. |
| Star, | huara, | erujái, T. |


| Identities in Pano and Tacana. |  |
| :---: | :---: |
| Pano. | Tacana. |
| imi, | ami. |
| abaque, | ebacua. |
| nami, | yami. |
| matsy, | emata. |
| bari, | bavr. |
| hata, | bata. |
| omibaque, | qui embaque. |
| uirti (star), | ireti. |
| ina, | eana. |
| cucu, | cucu, juju. |
| jena, | ena. |

The only two numerals which can be claimed for the Tacana evidently also belong to the Pano:

|  | Tacana. | Pano. |
| :---: | :---: | :--- |
| One, | pea, | atchou-pé, pa-jü. |
| Two, | beta, | ta-ba, ru-bä. |

The important words for maize, salt, tobacco and banana seem to be borrowed from other tongues:

Malze, shije or dije.-Probably the Pano schequi, which in turn is un-
doubtedly the Keclua cherchi, roasted maize. The grain evidently became known to the Panos ns nu article of food in this prepmred form.
Salt, banu.-Apparently a varlation of the Arawak pamu.
Tobaceo, umazi or umarsi-Doubtless, from the Tupi put-uma, Maypure sema.

Banana, bondare and naja. - The former is the Pano banara, panala, and naja is the same word with the first syllable omitted ; banara is but a corruption of banana, an Arawak word.

The color names appear to me irreducible, except that for "green," which has been borrowed from the Aymara.

| White, | pasana. |
| :--- | :--- |
| Black, | devena. |
| Blue, | danane. |
| Red, | derena. |
| Yellow, | tidnia. |

A few similarities to the Moseteño, a language spoken by a neighboring stock, may be noted:

|  | Tacana. | Moseresio. |
| :--- | :---: | :---: |
| Fish, | see, | señ. |
| Foot, | euatsi, | yu. |
| God, | edutzi, | dogit. |
| Water (river), | ena, | ogñi. |
| Woman, | epuna, | phen. |

But these have little significance.

## Phonetics.

All the Tacanan dialects are facile and agreeable in their sounds, differing in this respect from the Aymara and Kechua, both of which are harsh to the European ear and almost unpronounceable to a foreigner. The Araona has no sound which is not capable of correct expression by the Spanish alphabet; but the Tacana has the strong English th (as in this); a soft, scarcely audible aspirate, and a sound intermediate between $t, d$ and $r$ (heard in $d u d u$, brother; tata, father, etc.), while the soft Spanish th (as in Span. ce, ci) is absent. The $l$ is not heard in any native Tacana word.

The statement quoted by D'Orbigny, from a MS. of one of the missionaries, to the effect that the Tacana is one of the most guttural and harshest of languages, is quite incorrect and could not have been intended to apply to any of the dialects of this group.

## Pronouns.

The paradigms of the Tacana pronouns are as follows:

| I, | ema. | We, | ecuana. |
| :--- | :--- | :--- | :--- |
| Of me or mine, | quiema. | Of us, our, | ecuanasa. |
| For me, | quiemapuji. | For us, | ecuana puji. |

froc. amer. pirilos. soc. xxx. 137. g. printed march 8, 1892.

| To me, <br> With me, | ema. | To us, | ecuana. |
| :--- | :--- | :--- | :--- |
| emaneje. | With us, | ecuananeje. |  |
| Thou, | miada. | You, | micıana. |
| Thine, | miqueda. | Your, | micuanasa. |
| For thee, | mique puji. | For you, | micuanapuji. |
| To thee, | mida. | To you, | micuana. |
| With thee, | mineje. | With you, | micuananeje. |
| He or she, | tueda. | That, | ichu. |
| Those, | tuedacuana. | Those, | ichucuana. |
| His or her, | tuseda. | This one, | jida. |
| This, | yhe. | These ones, | jida cuana. |
| These, | yhecuana. | Who? | aydeni. |

## Verbal Forms.

Of all the dialects the Tacana is richest in verbal forms, and its various subdialects are less variable than its neighbors.

Further, Armentia states that all the dialects have a dual number in both verbs and pronouns, but his work does not furnish the means of analyzing the character of this dual. As is well known to grammarians, there are several very different conceptions of duality in language.

The notion of action in the verbal theme undergoes modification by suffixes, thus:
$h a$, to make, to do.
$e$-hatani, I am doing ( $e=e m a=\mathrm{I}$ ).
e-hametani, I am ordering it to be done.
aque, imperative, do ye.
atique, go thou and do.
Of such suffixes, $j a$ expresses desire or to wish, as:
puti-ja, I wish to go.
dia $-j a$, I wish to ent.
idi.ja, I wish to drink.
The suffix $j i$, appended to a noun, signifies possession, as chipilo$j i$, one having money; but reduplicated and suffixed to a verb, it conveys the sense of past time, as :
puti.jöj, he has already gone.
dia.juit, ho hans already enten.

The termination $t i$ appears to be that of the reflexive verb :
dama, to cover.
ja damati, to cover oneself.
The neuter is changed to the active signification by the suffix me :
manu, to die.
manuame, to kill.
ja manuamejiji, he who has killed another.
Many verbs are compounded by simple juxtaposition, as :
babe, to know ; quisa, to tell ; whence :
babequisa, to teach, $i$. e., to tell what one knows.
The word babe, to know, is itself a derivative from $b a$, to see, which also appears in such compounds as diaba (from dia, to eat), to eat, seeing, i.e., to test or try a food (probar la comida); and batsuatique (tsuati = above), to look upward.

## Literature and Texts.

The literature of the Tacanan dialects-if I may apply this term to such meagre material-is widely scattered and difficult of access. Ludewig, in his Literature of American Aboriginal Languages (p. 206), speaks of it as a dialect of the Yurucare, with which it has not the slightest affinity. The same author gives the Sapibocona as a dialect of the Kechua (p. 168), and the Maropa as related to the Yuracare.

Of the Tacana proper I have made use of three published vocabularies: 1. That given by H. A. Weddell, Voyage dans le Nord de la Bolivie (Paris, 1859). He gives forty words and six numerals, obtained from a party of Tacanas from Ixiamas and Tumupasa, whom he met at Guanay. 2. A vocabulary of one hundred and fifty-seven words and six numerals, by Dr. E. R. Heath, contributed by him to the Kansas City Review, April, 1883. 3. A vocabulary of forty-eight words and ten numerals, accompanied by grammatical observations by the Rev. Nicholas Armentia, published in his Exploracion del Rio Madre de Dios (La Paz, 1889 ).

The only printed text I have found is a small octavo of forty-one pages, with the following title:
"Catecismo | de la | Doctrina Christiana | en Idioma Tacana |
por un Misionero del Colejio de | Propaganda-fide de la $\mid$ Paz de Ayacucho | $\mathbf{1 8 5 9}$. | Imprenta de Vapor.-Calle de la Aduana, No. $3^{6}$.

The text is entirely in Tacana, without the corresponding Spanish, and embraces the Pater, Credo, Salve, Smaller Catechism, Explanation of the Doctrine, the Via Sacra, etc. I have been unable to discover the author.
Further, Armentia gives also vocabularies of the Araona and Cavineño dialects, and Dr. Heath supplies one of the Maropa. For the Sapibocona, I have relied on that printed by Hervas in his Vocabulario Poliglotto.

Dr. Heath refers to the great similarity between the Maropa and Tacana dialects, and adds the remark: "The Maropas have many words that have significations widely different ; etra means bone and also hair ; biya means a louse, a wasp and urine." Probably there is a difference in accent or inflection, which is not apparent to the European ear, but which to the native indicates which sense is intended.

The version of the Lord's Prayer given below, as well as that of the Creed, are taken from the Catecismo en Idioma Tacana, above referred to. I have added an interlinear translation of the former, and also a translation of the latter, as there is evidently some slight change of the customary phraseology.

## Lord's Prayer in Tacana.

Ecuanasa tata exacuapachasu, mi canichanapajïi papu mique ebani, Our father heaven in, thou sacred come thy name, mique evacuapacha ecuanasa papu, mique enime eni papu ye canasu, thy heaven (to) us come, thy wish come earthon, concuapachasu epuani nime viame. Amen Jesus. Pamapa zinesu ccuanasa
heaven in come (iike to?). Amen Jesus. Every day our equita tucheji jeave ecuanatiaque. Ecuanasa jucha cuana chenubuque, borly food to us. Our sins forgive, cuigje bata couaneda eichenubania ecuanasa manu cuana, ba ecuana even ns we forgive
dajajameji mi juchasu, inasiguaque pamapa madada cuanasu. Amen remove all evil us from.
Jesur.
Alongside of this I quote the same in the Guariza dialect, from Prof. 'Teza's work, already mentioned :

## Lord's Prayer in Guariza.

Echeza tata evacuepachazu anigi mi, ibbubatagigicapapuini mige evani, echebe pezu papu eyucaini mi reyno, agigicapapuini mige enime eubbazu evacuepachazu batanja. Ecama geabe chinezu tiage echeza jana pugi: echebe jucha gigicuana ichenubage echeza jucha çetahu, tuevata ecama echeza majaycuana eichenubbaza: ecama tucheme age veca par'ajaja juchazu, chuteme jubua ichenume cuanazu ecama viapenege.

It is evident that this is a version by a different hand into a closely allied dialect.

## Creed in Tacana.

I believe in the Father God, of all things in heaven and on earth the maker; I believe in the Lord Jesus Christ, Mis only Son ; who was conceived by the grace of the Holy Spirit, and was born of a virgin ; he suffered under the power of Pilate; he was crucified; he died; he went down to limbo; from among the dead he arose on the third day; he went up to heaven ; there he is seated on the right hand of the Father almighty; whence he shall come to judge the living and the dead ; I believe in the Holy Spirit, the holy Catholic church, the communion of all the saints, the pardon of sins, and that our bodies shall rise again, and that life shall not end.

Erma jei eania tata Dios pamapa aji, evacuapachasu ye eausu seguameji ; jei eania tata Jesucristo tusa evacua peada quita; bataji puida Espiritu Santasa gracia eje putzu; etsesa cuara Virgen cuinaida; iche. nuda cuana vidinaida Pilatosa emesu; tatajiji puida crususu; dapia manujiji puida, limbosu buteida; manujiji cuana dujusu nettianaida quimicha zinesu; soatida evacuapacha, mesa tata pamapa aji bai eni bene cani, da jenettia epueicha eideni cuana, manujiji cuana equisaba puji ; eama jei eania Espiritu Santosa, santa Yglesia catolicasu, santo chanasa aysaida jacti cuanasa jaditati, jucha cuanasa perdon, ecuanasa equita quita eydeyo pupebe mave eide cani.

## Vocabulary-English-Tacana and Dialects.

T. $=$ Tacana (T. W. $=$ Tacana of Weddell); M. $=$ Maropa $; \mathrm{S} .=$ Sapibocona : $\Lambda=$ Araona $; C=$ Cavineño.
Orthography Spanish; $j=$ Eng. $h ; h$ searcely perceptible; $z=$ Eng. th.

Alive, eicle'ja, T. ; escheveve, M. All, pamapa, T.; huana', M.
Always, daja-pincha, T.
Arm, ebu'e, T.; embui, M. (probably
from ema, hand).
Arrow, pisa, T.; pizi, M.
Ascend, to, tsuati, T.

Ashes, etimu, T., A.; etiquimuru, C. Aunt, nene, T., A., C.
Bad, mada'da, T.; emasa', M. ( $=$ ma-saida, not good).
Bark (of tree), eviti, T.; embiti, M.
Beard, quéda, T.; eiiesa', M.
Belly, etu, T.; ese', M.; edde, T. (W.)

Bird, dia, T.; bu'ni, M.
Black, devena, T.; sebe'mi, M.
Blood, ami, T. and M.
Blue, danane, T.; savame', M.
Body, equila, T., C.; ea'mi, ecuicha, A.
Bone, e'tro, T.; etra', M.
Bow, a, pisatri, T.; pizatrue, M. (see Arrow).
Boy, canane, edeave, T.; dreja've, M. (see Man); toro, A.; ebacuapi, C. (see Child; ve is the diminutive suffix).
Breasts ( = mammæ), atru,T. and M.
Brother (my elder), quema-onici, T.; be'tri, M.

Brother (my younger), quema-cou', T.; chintri, M.

Brother, zau, vitzecua, A.; jau, usi, C.

Canne, cua'bua, 'T. ; cuamba', M., A.; cuaba, C. (Aynara).
Charcoal, etide, T.; etesi. . ; etirutseve, C.
Chest, the, etredu, T.; celucntru, M. (breast bone? see Bone).
Child, ebacua, T.
Cold, bruada, T.; vinna'ma, M.
Come, 10, pue, T.; apueya, M.; рири, Т.
Cry, to, tsia-tsia, T.; jejaje, M. (imitative).
Dance, to, tiri-tiri, T. and M. (imitative).
Daughter, my (by father and mother), onibaquapmetu, T.; quienborqua, М. ; cbackepuna, А., С. (see Child and Woman).
May, tri'ne, 'T. and M.; chine, S.
1)ead, nanujiji, T, and M.

Jeer, Ba'que, 'I.; batru'nu, M. $_{\text {I }}$

1) ie, 10, ппипи, ' I '.

Dog, rcki, T'. : pacu, M.
Drink, n, wyeidi, 'I'.; eidi, A.; rigi, C.
Drink, to, idi, eicli,'I', juischitri, M.

Duck, a, se'e, T.; zu'zi, M.
Ear, edaja, T.; eshacue'na, M.
Earth (land), medi, edua, T.; metri, M.; mechi, C., S.; eua, mezi, A.
M.; Eat, to, dia-dia, T.; chancha, M.

Esg, e'ja, T. and M.
Evening, trineti'a, T. ; trinequa, M. $(\sec D a y)$.
Eye, ctradru'ndru, T.; etachundru, M.; etuachìmu, S. (see Sister, Elder and Hair; apparently "sister hairs," i. e., eyebrows, eyelashes).
Face, embu, T. and M.
Father, my (by son), rema-tata, T.; qui-tata, M.; tata, or checua, S. C.
Futher, by (by daughter), rematata, T.; qui-tata, M.
Far, uqueda, T.; huazumi, M.
Feathers, eina,' '. ; enuqua, M. (com. pare IIair).
Fingers, ema, T.; emechuja, M. (=head of hand).
Fire, qua'ti, T.; cua'ti, M., S., A.; etiqui, C.; otro, T. (W.) (compare Ashes and Wood).
Fish, sisi, M.; see, T.; ju, $\mathbf{\Lambda}$.
Flesh (see Meat, Body).
Fly, a, vere-vere, T.; bebi, M. (imitative).
Food, jana, T., A.; ctduca, C.
Foot, cquatri, T'. ; coatri, II.; ebbacki, S.; euatsi, A., C.

Forehcad, emali, I. ; cmma'ta, M. and S .
Forest, eji'je, T.; hayjintru, M.
Friend, apare'je, T. ; epere'je, M.
Girl, mutu, epunave, 'l'. : punave, M.; cbazacua, A.; cbucuna, C. (ve = diminutive; see Child, Daughter mnd Woman).
Give, to, tia, T.; tia'na, M.
Go, to, mu'ti, 'I'. und M.; muj, A.; cute, C .
God, cruchi, S.; celutzi, 'T'., A.; educhi, C.

Good, saida, saipiave, T. ; jundra, M. Grass, nuta ${ }^{\text {, T.; } e a^{\prime} j i, ~ M . ~}$
Great, aida, T.; haymi, M.
Green, china. T.; schepiëi, M.
Hair, echu-ena, T.; ctra, M.; echau, S. (see Ilead, Feather, Wing).

Hand, e'mu, T.; eme, M., S., A.; Man, de'j${ }^{\prime}$, T., C.; dreja, M.; reanci, eme-tucu, C.
He (pron.), tu.edu, T.; tu-ve, M.
Head, echu, T.; echuja, M. and S.; echua, A.; iyиса, О.
Heart, masu'mo, T.; masumu', M.; emofobo, A.; eniju, C.
Heaven, evacuepana, S.; evacuapacha, T.; buepo, T. (W.).
Here, upi'ca, 'Т.; iezu', М.
Hill, a (or mountain), emata, T.; emina, M. (probably from ema, extremlty, point, hand).
Hot, $\sin a^{\prime} d u$, T.; zintri-trime, M.
House, ejlej, T. ; etai, M., A.; etare,C.
Husband, my, quemayavi, T.; qui. ave, M.
I (pron), emu (active form, $e a^{\prime} m a$ ), T.; $e^{\prime} m e, ~ M$.

Ice, ea'na, T'.
Infant, canane-chidi, T. (see Boy); ejanana, M.
Iron, peama', M.
Island, edapu'pu, Т.; ischu'pupu, М.
Jar (Sp. olla), jutu, T., A.; emaricaca, C.
Kettle, co'to, T.
Kill, to, manuame, emanuani, T.; mane'me, M.
Knife, cuchilo, M. (Spanish).
Know, to, babe, T.
Lake, bai, T. and M.; eubihure, S. (see Water).
Laugh, to, yleba'ti, T.; yaschi-bati, M.

Leaf, a, equenu', M.
Learn, babe tsua, T.
Leg, etida'da, T.; eta', M.; etta, T. (W.).

Lie, to, billumimi, T.; ea'na, M.

Lightning, tseru-tseru, T.; jili-jill, M.; ilapa, S.

Love, to, esbune'ba, T.; imbunimbu, M.
Maize, dije, T.; shije, M.; zia, A.
Make, to (Sp. hacer), ha, T.
S.; deja, ecuicha, A.

Many, yucua'da, T.; dru'je, M.
Meat, aicha, T.; ea'mi, M.; yami, A.; erami, C.

Money, chipilo, T.
Moon, ba'di, T., A., C.; lantri', M.; bari, S.
Morning, matachu, T.; mai'ta, M.
Mother, my (by son or daughter), quema-qua'ra, T.; quicua, M.; cua, S.; uaua-di, A.; cuaha', C.
Mouth, aquatri, T.; equa'tra, M.; ebbo, T. (W.).
Musquito, sani or di, T.; dri, M.
My, quema, T.; qui, M.
Name, ebani, T.; embani, M.
Nails, ema.tichi, T.; eme tichi, M. (see Hand).
Near, narise, T.; drema', M.
Neck, eti'pi, T. and M. and S.
Never, niquietsunu.
Night, liza, T.; apume', M.
No, $m a^{\prime} v e, ~ T . ~ a n d ~ M . ~$
Nose, evi-eni, T.; evi, M. and S.
Old, ecti, T.; e'si, M.
Our, ecuanasa, T.
People, endrani, T.; drianiqua'na, M.

Plantain (Sp. platano), nasa, T.; naja, A.; hondare, C.
Prairie, nutsa'ni, T.
Rain, nai, T. and M.
Rattlesuake, bacua dada, T.; sum bacua, M. (see Snake).
Red, derena, T.; utrume, M.
River, ena, T.; munu, A.; exeperearida, C. (ena = water).
Rivulet, enabaque, T. (=child. water).

Road, edidi. T.; edisi, A.; edigi, C. Think, to, piba, T., A.; adeba, C.
Run, to, judu'du, T.; vandrundu, M. This, yhe, T.; iye, M.
Salt, banu, T.; bano, M.
Say, to, quisa, T.
See, to, ba, T.; jam-bati, M.
Silver, depe, T.; sepe, A.
Sing, to, satsu, T.; zatru, M.
Sister, zatna, A.; tatna, T.; nasi, jane, C.
Sister, my elder, quema-du'du, T.; drundru, M.
Sister, my younger, quematona, T.; la'na, M. (in M. eldest brother says cani to his youngest sister).
Sit, to, aniu'ti, T.; animbotia, M.
Skin, ebbai, T. (W.).
Sky, bueyu'pa, T.; embaquapacha', - Town, eju'de,T.; ejuntre', M.; erere, M.

Sleep, to, tabi, T. and M.
Small, clicli, T.; batavi'chi, M.
Snake, bacua, T. and M.
Son, my (by father or mother), quema-embami, T.; qui-embaqua, M.; ena, A.; ebacua, T. C. (see Child, Daughter).
Soul, enilu, T.; ejiay, A.; yata. ecuana, C.
Speak, to, mimi, T. and M.
Squash, a, je'nu, T.; je'mi, M.
Stand, to, enutsinejcnetsi, 'I.; ne'ti, M.

Star, eru'jui or etubay, T.; buana'vi, M.; clujuy, A.; purari, C.

Steal, to, tsi, T.; tri, M.
Stone, tumu, T., C., A. and S.; tuma, M.
Strong, tuele'da. T.; tretremi, M.
Sun, ire'li or ilecti, 'I.; injcti, M.; igeti, C .
'Teach, to, buberquisu, T'.
'Teeth, etre, T. and M.; éclee', T'. (W.) (compare Bone).

That, ychu, T.; ichu, M.
'rhere, clupia, rlapiavi, '1.: ichuzu, M.

They, ychu.cuana, '1'; tuma'se, M.

Thorn, aquida, T.; acuisa, A.; acuija, C.
Thou, mi-cla, T.; mi-ve, M.
Thumb, ema-chuai, T.; eme-chuja, M. (see Hand, Fingers, Head).

Thunder, etiria'ni, T.; $t i^{\prime} r i, ~ M$.
Tobacco, umar'si, T.; umaza, M.
To-day, jeave, T. and M.
To-morrow, maita-püicha, T.; bantra, M. (see Yesterday).
Toes, equatri-ritrana, T.; evatritichi, M. (see Foot and Nails).
Tongue, cana, T., M. and S.
Tortoise, dati, T.; dra'ti, M.
A.; ери, C. (see House).

Tree, $a^{\prime} q u i$, T. and M.; acui, A., C.
Uncle, juju, T., A.; сисu, C. (a celebrated word, probably of Carib origin, on which Martius founded his classification of the "Guck" nations).
Walk, to, arease', T.; aze, M.
Warrior, jamaji lipuji (a quarrelsome person), M.
Water, eavi, T.; yu'vi, M.; euvi, S., A.; ena, C.; yáni, T. (W.).

We, ecuana (dual form, etsca) T.; ecama', M.
When, quietsunu, T.
White, pasana, T.; paza'me, M.
Who, ayde'ni, T.; hayse, M.
Wife, quema-equaui, T. ; quicvane, M.
Wind, be'ni, '1'. and M. (from this comes the name of the Rio Beni $=$ Wind river).
Wing, cnabay, T.; ennambai, M. (see Feathers).
Wish, to, (Spanı querer), tsada, '1.
Wommn, ерииа, a'no, 'T.; a'nu, M. mad S.; rpuna, C., $\Lambda$.
Wood, ci'na, T.; a'qui (=tree), M.; cueti-munu, $\Lambda$; cuati, C. (sce Fire).

Work, to, mudumudu, T.; mundru, Yes, ehe, T.; ee, M.
M.

Ye or you, micuana, T.; mica've, M.
Year, mara. S.
Yellow, tidnia, T.; zahuami', M.

Yesterday, maita püicha, T.; maita, M. (see To-morrowo). Young, edea-ve, T.; dreja-veve, M. (=young man).

## Numerals.

1, pea, peada, peara, T.; pembive, M.; pebi, S.; equene, Cat.
2, beta, T., M. and S.
3, quimicha, T.; camischa, M. (Aymara).
4, pusi, T. and M. (Aymara).
5, pichica, T. and M. (Aymara).
6, sucuta, T. and M. (Aymara).
7, siete, T. (Spanish).
8, ocho (Spanish).
9, nueve (Spanish).
10, tunca, M. (Aymara); peara tunca, T.
20, beta tunca, M. (Aymara).

## Tacana-English Vocabulary.

Aicha, meat, flesh.
Aida, great.
Ami, blood.
Aniuti, to sit.
$A^{\prime}$ no, woman, wife.
Apareje, frieud.
Aquatri, mouth.
Aqui, tree.
Aquida, thorn.
Arease, to walk.
Atru, mamme.
Aydeni, who.
$B a$, to see.
Babe, to know.
Babe quisa, to teach.
Babe-tsua, to learn.
Bacua, snake.
Bисиа-dada, rattlesuake.
Badi, moon.
Bai, lake.
Banu, salt.
Baque, a deer.
Beni, wind.
Beta, two.
Bruada, cold.

Bueyupa, sky.
Dudu, sister (elder).
Canane, a boy.
Cani, sister (by brother).
Chicti, small.
China, green.
Chipilo, money.
Clupia, there.
Cosi, younger brother.
Coto, kettle.
Juabua, canoe.
Cuati, fire.
Daja-piucha, always.
Danane, blue.
Dapiave, there.
Dati, tortoise.
Deja, man.
Depe, silver.
Derena, red.
Devena, black.
Dia, bird.
Dia-dia, to cat.
Dije, maize.
Eana, tongue.
$E u^{\prime} n a$, ice.

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Eavi, water.
Ebani, name.
Elbai, skin.
Ebue, arm.
Echu, head.
Echuena, hair.
Ecli, old.
Ecuana, we.
Ecuanasa, our.
Edeare, young.
Edidi, road, path.
Edaja, the ear.
Eddapupu, island.
Edeave, a boy.
Edua, earth, land.
Ehe, yes.
Eicleja, nlive.
Ei'na, wood.
Eina, feathers.
Eja, an egg.
Ejije, forest.
Ejtrj, house.
Ejude, town.
Ema, or eama, I.
$E^{\prime} m a$, hand, fingers.
$E^{\prime} m a \cdot c h u a$, thumb.
Emali, forehead.
Emate, lill.
$E^{\prime} m a-t i c h i$, nails.
Embami, son.
Embu, the face.
Ena, river.
Enabay, wing.
Enidu, soul.
Epuna, woman. wife
Equani, wife.
Equatri, foot.
Equatri-ritrana, tous.
Equita, lody.
Eruchi, god.
Eirujeri, star.
Eishunebia, to love.
Eitidadu, the leg.
Eitile, charcoml.
Etimu, ashes.
ritlpi, neck.

Etiriani, thunder.
Etra driendru, the cye.
Etre, tooth.
Etredu, the chest.
Etro, bone.
Etu, belly.
Etubay, star.
Evacuepacha, heaven.
Evieni, nose.
Eviti, bark of a tree.
$H \alpha$, to do, to make.
Idi, to drink.
Ireti, sun.
Jana, food.
Jeare, to-day.
Jenu, squash.
$J u d u{ }^{\prime} d u$, to run.
Juju, uncle.
Jutu, jar.
Liza, night.
Madada, bnd.
Macta puicha, to-morrow or yesterday.
Manu, to die.
Manuame, to kill.
Manujiji, dead.
Masumo, heart.
Matachu, morning.
Mave, no.
Medi, earth, land.
Micla, thou.
Micuana, you.
Mimi, to spenk.
Mudu mudu, to work.
Nai, rain.
Narise, near.
Nusa, plantain.
Nene, aunt.
Niquietsuna, never.
Nutsa, grass.
Nutatmi, prairie.
Onibaquapuna, daughter.
Onici, elder brother.
Pemapa, all.
Pect, one.
recama, iron.

Piba, to think.
Pichica, five.
Pisa, arrow.
Pisatri, a bow.
Pue, to come.
I'usi, four.
Puti, to go.
Putu, girl.
Quara, mother.
Quedi, beard.
Quema, my.
Quietsunu, when.
Quimicha, three.
Quisa, to say, to tell.
Saipiave, good.
Sani, musquito.
Satsu, to sing.
$S e^{\prime} e$, a duck.
Sinada, hot.
Sisi, fish.
Sucuta, six.
Tubi, to sleep.
T'uta, father.
Tia, to give.
Tidnia, yellow.
Tiri-tiri, to dance.

Tona, sister (younger).
Trine, day.
Trinetia, evening.
Tsada, to wish.
Tseru-tseru, lightning.
Tsi, to steal.
Tsia-tsia, to cry.
Tisuati, to ascend.
Tuched $a$, strong.
Tu-eda, he.
T'umu, a stone or rock.
Uchi, a dog.
Uitzecua, brother.
Uinursi, tobacco.
Upica, here.
Uqueda, far.
Vere-vere, a fly.
Yavi, husband.
Ychu, that.
Ychucuana, those, they.
Ydebati, to laugh.
Yhe, this.
Yucuada, many.
Zatna, sister.
$Z a u$, brother.

## II.

## THE JIVARO LANGUAGF.

The material which I have to present on this language is entirely from unpublished sources, and is the more valuable as, so far as I know, not even a vocabulary of this important idiom has ever been printed.

The Jivaros (Givaros, Xivaros, Hibaros, Xeberos, etc.) are a numerous and powerful nation, mostly yet in a savage state, who dwell about the head waters of the rivers Paute, Morona, Santiago and other upper affluents of the Marañon, between $2^{\circ}$ and $4^{\circ} 30^{\prime}$ South latitude, where they occupy the eastern slope of the Cordilleras. I have described their general culture and history in my work on The American Race, pp. 282-284.

They are said to present the peculiarity of unusual lightness in color, and features of a decidedly Aryan type.* These traits have

[^3]been usually explained by a supposed extensive infusion of Spanish blood when their ancestors captured the city of Logroño in 1599 and carried off the white women as wives. More probably they share, with the Yurucares, Tacanas and other Andean nations, the peculiarity of a complexion several shades lighter than that of the Kechuas and Aymaras.

They have been little influenced by European visitors. A recent authority states that there are scarcely a hundred and fifty Christian families in the whole of the immense province of Canolos, a part of which they inhabit, and the area of which is more than 8000 square leagues.*

The sources which I have had at command are two MSS. in the British Museum, the name of the author not given, but from some remarks probably a German Jesuit, who was a missionary to the tribe towards the close of the last century.

The titles are:
"Vocabulario en la Lengua Castellana, la del Ynga, y Xebera." Small 8 vo, fol. 35. The vocabulary embraces about 1300 words, and is apparently complete.
"Gramatica de la Lengua Xebera." Same size. This MS. is imperfect, leaves being lacking both at the beginning and the end.

From these MSS. I have prepared the following sketch of this tongue.

## Phonetics.

The sounds of the language are described as difficult to a European and fluctuating in character. The indistinct and alternating nature of certain phonetic elements appears in the Jivaro as in so many American tongues.

In vowel sounds, the $o$ is often confounded with the $u$, the $e$ with the $i$, and the $e$ with the $\alpha$, which is like the German $\dot{b}$. The complex vowel sound represented by ôu, as in pôung, fire, is especially difficult for a foreigner. The vowels $a$ and $o$, when followed by $i$, are often clided.

The consonants $d, l, r$ and $l$ are frequently alternated (that is, the one sound may be used at will for the other), or an indistinct sound is uttered, which may approach any one of them. The $n$ is

[^4]frequently omitted or uttered so slightly as to be scarcely audible. In the syllables quec and qued the final consonants are rarely clear, and both often have the sound $q^{r} r$. In the vocabulary the $\tilde{o}$ and sch should be pronounced as in German.

## Nouns.

The relations of nouns are indicated by suffixes, e.g. :
Tana, the forest.
Tananguec, to the forest, or, in the forest.
Tanancla, from the forest.
Some words indicate the genitive relation by the termination qui.

Nouns may be formed from verbals by the suffix $n i$ or $b i$, as timinlec, I die; timipi, the dead person, the corpse; also by the suffix asu, as dacotalec, I am ashamed; dacotasu, one who is ashamed. The infix cuda has the same effect.

The instrumental sense is conveyed by the termination $c$, which is the abbreviation of quec or quecla.

Seotic, knife.
Seotic quec, with a knife.
" With," in the sense of accompaniment, is expressed by lec, as:
Sadasulec, with a married man.
Paparulec, with my father.
Direction from is indicated by the termination quecla; "for" or "instead of" by maleg, as:

Natquimaleg, for or in place of another.
Pronouns.
The personal pronouns are:

I, cou, qûa.
Thou, quenma.
He or she, nana.
This one, asu.
The possessives are:
Mine, quaqui, ru, ca.
Thine, quenmaqui, palin, ma.
His, nanaqui.

We, cuda, queñmoa, mapoa.
You, queñma'ma.
They, nauba, nanalosa, nanadap'rlosa.
Those, asudap'rlosa.

Our, cudaqui, mapoa.
Your, quenmamaqui, palenma.
Their, nanaqui.

The second forms above given are suffixes or infixes, as:
Sudaru, my husband.
Sudapalin, thy husband.
Loantacasu, my desire.
Loantamasu, thy desire.
Loantasu, his desire.
As usual in American languages, there is no relative pronoun, its place being supplied by participial constructions.

## Number and Gender.

Names of inanimate objects usually undergo no change in the plural. For persons the plural is formed by adding the suffix losa or nanlosa. In possessives the plural suffix is often $n a$, as:

Hucha, a $\sin$.
Huchuneng, his sin.
Huchanengna, his sins.
Saden, his wife.
Sadena, his wives.
In verbals and verbs the plural termination may be $d \bar{o} c$, as :

## Huchapidöc, sinnings.

Anulao, leave me.
Anulaodöc, leave us.
Infixes may be employed in place of these suffixes, especially in nouns derived from adjectives and participles. The most usual of these is $a_{r}^{l}$, as:

Nambilec, I live.
Numbiosu, he who lives, the living man.
Nambia cousu, those who live, the living.
The syllable ma, used either as infix or suffix, also conveys the plural sense, as:

## Palen, thine.

Palenma, your.
Feminines are distinguished by the suffix $l u$ or $l l u$, as vila, boy; vilalu, girl ; lus, man ; luslu, woman. Also apparently by a change of another vowel to the 4 , as we find, sadulec, married man; sudalec, married woman.

## Numerals.

The ancient cardinal and ordinal numbers of the Jivaros were as follows:

1, ala.
2, catu.
3, cala.
4, encatu.
5, alacötegladu (ala, one ; ötegla, hand; du, termination).
6, intimutu (the thumb, of the second hand).
7. tannituna (the index finger, of the second hand).

8, tannituna cabiasu (=the finger next the index).
9 , bitin ötegla cabiasu.
10. catögladu (三two hands).

This cumbrous plan has long been superseded by the adoption from the Kechua of the names of numbers above five, so that the present numeration is :

| 1, | ala. | 5, | alacötegludu. | 9, | iskon. |
| :--- | :--- | ---: | :--- | ---: | :--- |
| 2, | catu. | 6, | sokta. | 10, | chunka. |
| 3, | cala. | 7, | ganchis. | 100, | pazai. |
| 4, | encatu. | 8, | pusac. |  |  |

## Particles.

A marked feature of this tongue, which it shares with so many others on the American Continent, is the abounding use of particles to modify the meaning of roots and themes. Whether these are to be regarded as themselves the remnants of worn-down themes, or as primitive phonetic elements, is a yet unsettled question, though for myself I incline to the latter opinion. The MS. I am quoting gives a long list of such significant particles, the most important of which are as follows:
$a$ or ha indicates causative action on another ; as uranlec, I eat ; auranlec, I cause another to eat.
apa or $p a$ denotes present action, as nambilec, I live ; nambiapalec, I am now living.
ata or anda is a suffix denoting an interrogation.
cun, as an infix, denotes action about to take place.
ilala, as an infix, signifies that the action is of a permanent character.
imbo, as an infix, conveys a negative sense, and is ofien employed with the regular negative, cola.
itu, inserted before the termination of verbs, indicates that the action is done for another.
la, infixed, signifies that the action is for this one time only.
misan, infixed, conveys the sense that the action is shared by all present. na, as a suffix, indicates habit, as intulina, he who is habitually in a bad temper.
nunda, infixed in the present tense, denotes that the action takes place at some other time ; as notonundalce, I do it (am accustomed to do it, but am not doing it now).
$p a$ or mba, an affirmatory suffix.
qui, as an infix, denotes that the action takes place where the speaker is at the time.
$t i$ is a frequent euphonic suffix, which does not alter the meaning.
van, as suffix or infix, denotes possession; as huchavanlosa, those who hare sins.
ranan, like itu, signifies action for another; as muchavananamasu, thou who asks for us.
ya or nara, as a prefix, intimates a wish or desire; as palec, I see; yapalec, I wish to see.
yn, as a prefix, denotes reciprocal or mutual action; as yainmali, they desire to take each other (in marriage).

## Verbs.

The verbs have but two tenses, the present and the future. Occasionally the adverb epa, now, is prefixed to define the present, and nuca, pl. naupa, to denote a past time.

The formation of the future is frequently irregular, but the following examples will show its usual forms. It alone appears to presenta dual number.

|  | Present. <br> Singular. | Futurfe <br> Singular. | Future. Dual. | Future. <br> Plualal. |
| :---: | :---: | :---: | :---: | :---: |
| I do, | notolec, | notetic, | notoa, | notoaua. |
| I take, | malec, | matic, | max, | mauza. |
| I love, | tandeñlec, | tandeñelic, | tandeña, | tandeñaua. |
| I speak, | laonlec, | laontic, | laona, | laonaua |
| I die, | timinlec, | timintic, | timiantala, | timiantalua. |
| I priy, | maleale, | maleatic, | mateaa, | maleaua. |

The imperative is formed by the termination qued, often abbreviated to $q^{\prime} r$; as tecalec, I run; tecaqued, run thou. Other terminations of an imperative character are tan, aner, licaa and ma.

The substantive verb is not found in the language, its place being supplied by terminations, especially the pronouns ch or sucu, etc., as Peilrocu, I am P'edro; Pedroquenma, thou art Pedro ; moim-
bosucu, I am bad. In a similar sense the verb nolec or nilec, I do thus, I am thus, is often heard.

There is no trace of a true passive voice, its place being supplied by the sense of the verb or by particles.

At the conclusion of his MS. the author inserts two versions of the Lord's Prayer-the one " in the Xebera language, as it was spoken in the earliest times of the mission," the translation being that of Father Lucas de la Cueva (about 1655) ; the second in the language of the period of the writer, which I suppose to have been about one hundred and fifty years later.

Of the second or later of these I have ventured an interlinear translation, while the former I insert without a rendering.

## Lord's Prayer in Jivaro-Later Version.

Papa mapoa, mosninanloquee napala; linlinpalin nonisansu muchai; Father our, heaven in art thou; namethy holy become; quenmaquinlosamasu cudaquee unadiai; loantamasu nomisansu notoi
thy kingdom us to come; desire thy holy be maponsu mosninanloquec, nanaposu pilaasu lupaquec unda; uglilosa as heaven in, earthin; daily
tandamapoa epala ugli encaodec ; cudaqui huchabidüc anuladöc, maponsu bread our now to-day give; our sins forgive, as quenmoa unda alapila dape`dlosaqui huchanengna anulalidöc; anerat, we others their sins forgive;
quenmor dentatutan, quenmoa cola Dios ayuaimbocaquec; nanamengtu our our
moimbosü̈uegla atiegodac.
evil from deliver.

## Lord's Prayer in Jivaro-Earlier Version.

Papa napoa, mosenquec napalac linlinpalin ruchapalin; quenma quilo. samasu cudaquec undiai. Loantacasu notetiuma mapolina mosninanloquec inosupila asumincenloquec unda. Uglilosa tanda epala ugli encaodöc nulaodöc cutaqui hudabidöc; dengquina cuda anulalidöc aubaqui lucha nengna ; anerata apolata muchaquec amengdana; moimbocasuquegla atiego.

English-Jivaro Vocabulary.

Above, mosenqûec.
Ankle, tula.
Arm, da'mpa.
Arrow, na'mu.
Ashamed, to be, dacotalec.

Ask, to, mucha.
Bad, moâimbosu, aperosu.
Beard, amucuiola noteri,
Belly, du', metpi, oquiulec.
Below, vilenquec.
proc. amer. philos. soc. xxx. 137. I. printed march 16, 1892.

Bird, ilans'r, tiperllu.
Black, catli, cadladasu.
Blind, dapina.
Blood, uogladec.
Blue, carcaso.
Body, loqueglo, timipi.
Bone, lansi.
Born, to be, oclilec.
Boy, vila.
Branch, taümec.
Brave, nan'tapi.
Breast, mudin, titoi.
Brother, yalli, yuyu'uc.
Burn, to, ügedalec.
Buy, to, ucolatolec.
Calabash, pabi.
Call, to, pöclolec.
Child, babi.
Clothing, capi.
Come, to, undialec.
Cold no'qûed, noq'r.
Cotton, piterlu, boûngpalo.
Cover, to, patantulec.
Dance, to, danzalec.
Dawn, to, ügliti.
Day, 'ugli.
Dead, timiansu.
Dear, llada, nünilu.
Death, töminavasö.
Deer, boro'.
Dog, nini.
Drink, a, huasu, ülec.
Drink, to, upailucu.
Druin, tundo.
Dwell, to, nainbilec.
Ears, huec.
Farth, land, lu'pa.
Eat, to, culec, urinlec.
Egg. cado.
Eilbow, quäg'du.
Enemy, quegma.
Enter, to, da'lec.
Eyes, Uudn, du'pila.
Face, lluha (seo liyes).
F'enther, ambo'lu.
Female, cuoprn.

Field, $t i q^{\prime} n$ ñaua.
Finish, to, tavantulec.
Fire, poung.
Fish, samer, lapisamed.
Flesh, meat, canan.
Flint, mosed.
Flute, pi'leaña.
Flower, a, dancu.
Food, ca'lo'.
Foot, la'ndec.
Forehead, teqûeda'.
Forest, tana.
Girl, vilalu.
Give, to, $n^{\prime}$ galec.
Go, to, palec.
Gold, uri.
Good, môa, moali.
Grandfather, papaiangu.
Grandmother, ami'.
Great, cuni, chi, halupi.
Green, canin'rtia.
Grow, to, zuzulec.
Hair, hintic.
Hammock, ta'la.
Hand, ötegla.
Have, to, nali, napali.
Head, una.
Hear, to, la'oclce.
Heart, cangun.
Heaven, mosninanlo.
Herb, puma, daubad.
High, chi.
Hill, mutopi.
Iouse, pi'dec.
How? mapoli.
Hot, ucasu.
If, $a a, n^{\prime} t a t i$.
In, pa'lec.
Indian, muda, cuapr".
Iron, huana'.
Kill, to, atiminlec.
Knee, toto'pi.
Kinife, scotic.
Know, to (llings), nintitulec.
(persons), loutulec.
Lake, sungnu.

Last, na'pi.
Learn, to, nintitanalec.
Life, nambiacasu.
Light, a, ugli, ocli.
Light a fire, to, atengtulec.
Lightning, yümerlec.
Lip, $\ddot{u}^{\prime} t e c$.
Live, to, nambilec.
Lizard, tuda, lili.
Love, to, tan'deñlec.
Maize, tötrn, tötrlla.
Man (vir), queñmopineñ.
Married man, sadalec.
Married woman, sudalec.
Medicine man, wizard, pichotasu muda.
Monkey, duda, isolo, lolo.
Moon, ducat.
More, hapia.
Most, halupi, mointi.
Mother, auauc.
Mouth, lala'.
Much, cupi, bapo.
Name, linlin or lintin.
Navel, mumu'la.
Near, pa'ula.
New, na'lu.
Night, dogpili.
No, cola.
Nose, ne'tic.
Now, epala.
Old, tas'serpi.
Old (man), tas'pitosu.
Old (woman), tes'serllu.
Open, to, höquêrlec.
People, vapomuda.
Pray, to, malealec.
Raft, sudu'.
Rain, to, ölan, olanli.
Rainbow, podo'na.
Red, pip'rasu, togua.
Road, degaun.
Root, ötecnin.
Run, to, tecalec.
Salt, lamu'la.
Say, to, tulec.
See, to, lölec, löapalec.

Semen, miladöc.
Send, to, piuglec.
Shade, shadow, dachu'na.
Sierra, obituna.
Sin, a, hucha.
Sing, to, peclalec.
Silver, culiqued.
Sister, chayauc, cadecuc.
Sleep, bitilec.
Small, hamecha.
Smoke, cadlo or callo.
Snake, daua.
Soul, vada, timipi.
Spaniard, vadan.
Speak, to, laonlec, lalalec.
Star, tandola.
Stick, na'la, unguña.
Strong, nantapi.
Sun, quö'qui.
Sweet, yali.
Take, to, malec.
Tame, daiali.
Tapir, pahuala.
Teach, to, anintitulec.
Throat, unqued.
Thumb, intimutu.
To, qùec.
Tobacco, pinterlo, uhualec.
Tongue, ninegla.
Tooth, la'tec.
Totem, clan, patun.
Town, ninan'lo.
Tree, nala, squig'uinti.
Turtle, mado.
Uncle, aprcha.
Valley, $s a^{\prime} c a^{n}$.
Virgin, inilad.
Wall, lupa, patenpi.
Water, döc.
White, dudapua'su.
Who, deng.
Wind, tanlo' $a$.
Within, que'negla.
Without, $a^{\prime}$ dipi.
Woman, cuaprn, sada,
Wood, deboo.
Yellow, chapicaso.
III.

## THE CHOLONA LANGUAGE.

Nothing has heretofore been printed of the language of the Cholonas. This tribe dwells on the left bank of the upper Huallaga river, between $8^{\circ}-9^{\circ} 30^{\prime}$ South latitude. They were visited by Edward Pœppig in 1829, when he found them to number about 1000 souls, scattered in missions on the banks of the Monzon, Uchiza, Tocache and Pachiza, small streams flowing into the Huallaga. At the close of the last century they occupied a mission with the Hibitos or Xibitos, and together numbered about 5000.* Pœppig asserts that the Hibitos speak a wholly different tongue, but this is denied by my MS. authorities, who acknowledge only a dialectic difference; but the German traveler is correct in his statement that some of the wild Chunchos of the Sierra belong to the same stock.

My source of information in regard to this language is a MS. in the British Museum, entitled Arte de la Lengua Cholona. Its author was Fr. Pedro de la Mata, who wrote it in Truxillo in 1748 , from which original the MS. in question is a copy made by Fr. Geronimo Clota, in San Buenaventura del Valle, in 1772 . It is a small octavo of $13^{2}$ folios and is complete. Fathers José de Araujo and Francisco Gutierrez wrote also Artes of these dialects, but I have not discovered their manuscripts. There is also a MS. Arte de la Lengua Cholona, apparently anonymous, mentioned by Ludewig, Lit. of Amer. Aborig. Langs., p. 162.

The Cholona is a language extending over a small area, but it seems connected with no other, forming an independent stock. The only analogies worth mentioning which I have noted point towards dialects of the Arawak stock. For instance :

Sun, muxac. This seems $=k a m u$ saache, "the shining sun," of the Moxos.
Moon, pel; nllowing for $r=l$, this is close to the pueri of the Jucuna dialect.
Eye, nuehe; reminds one of the nuchii of the Canamirim ; the nacuque of the Uirim, cte.
Tonth, ate; again allowing $r=l$, thls is the ari of the Goajiro.
Black, salueh or chuluch; ghulck in Aruicu.
White, chech; glatikin Arafen.

[^5]Whether these analogies are sufficient to classify it with the NuArawak groups of Von den Steinen is doubtful. The differences in the personal pronouns especially seem to isolate it from the dialects of that stem.

## Phonetics.

The letters $b, d, r$ and $f$ are lacking in the Cholona alphabet. The soft $c h$ (as in "choose ") alternates with the soft th; the latter is represented in the Spanish alphabet by $z$, so that in the Arte, $z$ and $c h$ are interchangeable. Initial $g$ is hard before all vowels. The vowel represented by $o$ is stated to be between $o$ and $u$, and is probably the neutral vowel (as $u$ in "but "). The initial $i$ seems to represent a slight aspiration, as iayu or hayu, man. The elements $\tilde{n}$ and $\tilde{n}_{g}$ appear to be nasals.

The accent always falls on the last syllable, except in some verbal forms, where it is found on the penult. Poppig says that the sound of the spoken tongue is disagreeable to the European ear.

## Nouns.

The relations of the nominal theme are indicated by suffixes, which may be arranged to appear like a declension, though not really such.

Nom.-iayu or iayutup, the man.
Gen.-iayuilou, of the man.
Dat.-iayuhe or iayuge, to the man.
Acc-iayute or iayutu, the man.
Voc.-iayuey or iayupey (fem.), 0 man.
Abl.- iayute or tep, pat, nic, with or by the man.
The plural is formed by the insertion of the particle loi, before the case ending.
> nunlol, the men.
> nunlolloula, of the men.
> nunlolge, to the men.
> nunlolte, the men (accus.).
> nunloltep, with or by the men.

The case endings are used only when required to render the meaning clear, as Juantup Pedro ilami, Juan killed Pedro, where the accusative termination is omitted, that of the nominative sufficiently indicating the relation. Certain particles also give a plural
sense, in which case lol is omitted. These are mec, all ; pullem, along with; comec, incomec and pemec, signifying quantity, and manmiñ, as many as. Whenever the plural is indicated by the form of the attached pronoun, other plural signs may be omitted.

There is no grammatical distinction of gender in nouns, difference of sex being indicated by the terms nun, male ; ila, female, which may be either prefixed or suffixed, as:

> Man, nuniayu or iayunun.
> Woman, ilaiayu or iayuila.
> Boy, nunpullup.
> Girl, ilapullup.

A neuter or epicene gender can be denoted by a suffixed $\hat{o}$, as nunô, a person.

Various suffixes are added to nouns to modify their meaning, as: ric, signifying excess or abundance. $z u$, signifying absence or negation.
camayoc, indicating knowledge of a subject or practice in it. This word is borrowed from the Kechua.

## Pronouns.

The pronouns possess the prominence in this tongue which they so frequently show in American languages. All parts of speech can be grammatically inflected by their agency, and they generally: suffice to indicate the plural without the insertion of the plural sign, lol.

The primitive pronouns are:

I, oc.
Thou, mi.
He, sa.

We, quïa.
You, minaja.
They, chiju.

The separable or independent possessives are formed by adding to the primitives the particle alou, with slight euphonic changes:

Mine, ocrilou.
Thine, mimilou. IIIs, sailou.

Ours, quilhaguilou.
Yours, mimiloulia.
Theirs, chilutoloula.

The inseparable possessives are those prefixed to form the conjugation of verbs, and attached to certain classes of nouns. They are as follows :

```
My,a-
Thy, m-(masc.), p. (fem.).
His(uone).
Our, qui..
Your, mi- (both genders).
'lheir, chi-.
```

In the transitions of verbs the pronouns are abbreviated and certain other forms used, as :

Singular.
1st. $a$.
2d. $\quad m$ (masc.), $p$ (fem.).
$3 d . \quad y, c, v$.

Pleral.
1st. $q$, c.
2d. $m$.
3d. $p a, p o, m o, l a$.

In adjective nouns the former class are used with euphonic changes, as :
pallou, good, a good thing.
amallou, my good or advantage.
mimallou, thy good or advantage.
quimallou, our good or advantage.
mimallouha, your good or advantage.
chimallou, their good or advantage.
amallouven, it is to my advantage.
The possessives, which form inseparable prefixes to nouns, are united by means of various ellipses and euphonic changes. Example:
Yuca, el.
My yuca, anel.
Thy yuca, menel.
His yuca, nel.
Our yuca, quenel.
Your yuca, menelha.
Their yuca, enel.

## Numerals.

The numerals are employed with the addition of particles indicating the nature of the objects counted. The most usual of these particles appears to be zel or chil. The absolute forms, without these suffixes, are as follows:

| 1, | an. | 20, |
| :--- | :--- | :--- |
| ip-lec. |  |  |
| 2, | ip. | 30, |
| 3,-lec. |  |  |
| 4, | is. | 40, |
| minip. | 50, | quioc-lec. |
| 5, quioc. | 60, | ipzoc-lec. |
| 6, ipzoc. | 70, | quili-lec. |
| 7, | quilip. | 80, |
| pac-lec. |  |  |
| 8, pac. | 90, | ocon-lec. |
| 9, | ocon. | 100, |
| apichac. |  |  |

10, alec.
These offer little resemblance to any other tongue, though the words for 8 and 9 remind one of the Chinchasuyu pak and iskon.

## Verbs.

All active verbs are conjugated by transitions, formed by prefixing the pronoun of the person acting, and inserting immediately after it the pronoun of the person or thing acted upon. Example :
> amcollan, I thee love.
> mayian, thou me watchest. payian, he me watches.
> asac apuchihan, my food me they give.
> misac mapuchilan, thy food thee they give (masc.).
> pisac papuchilan, thy food thee they give (fem.).
> sac hapuchilan, his food him they give.
> ysac apahapuchan, their food them I give.

These are forms of the verb apuchan, to put before one, a derivative from amchan, to put, to place. Other examples :
amcolecte ameñan, I thee wish to love.
macolecte mimenan, thou me wishest to love.
Diosqui ñgolecte quimenan, we wish to love God.
Diostup iccolecte ymeñan, God wishes to love us.
The variation in the third person plural in the transitions appears to depend on the following conditions:
mo is used when the transition is from the third person singular to the third person plural, as in the expression, "he loves them."
po where the transition is from any of the other persons, singular or plural, to the third plural, as :

> apocollan, I love them.
> mipocollan, thou lovest them.
> quipocollan, we love them.
> mipocollan, you love them.
> chipocollan, they love them.
$p a$ where the verb implies another object besides the direct one, as :
ychac apahapuchan, I give them their food.
la is employed when the transition is from the third person plural to some other person than this, as:

> micollilatan, they love thee.
chi is confined to transitions from third plurals to third plurals, as:
chipocollan, they love them.

## Syntax.

The construction of phrases will be seen from the following examples:
Liman nê yayu yzip pusimpat añantumilā chectan.
Sierra in men their houses straw with covered are.
"The houses of the Indians in the Sierra are covered with straw."
The noun zip and the verb anantuman have their pronouns in the third person plural, so the plural particle lol is omitted.

The word chectan is an abbreviation of chi actan, the third person plural of the verb actan, I stand, I am in a place. This verb is much used to signify a usual action with reference to a noun, as cot actan, I bring water; zip actan, I fix or arrange my house; ayllan actan, I make the bed, etc.
Ñanmac yayu izipte izoz pachacotan.
Each Indian his house in his idols keeps.
"Every Indian keeps idols in his house."

## English-Cholona Vocabulary.

Armadillo, xax, tacla.
Bad, evil, ixioaj.
Black, zuluch or chal.
Boy, nun-pullup.
Dic, to, colhac.
Drink, a, axillam.
Drink, to, axcan.
Each, every, nunmac.
Eyes, nache.
Father, pa.
Flesh, body, aycha (K.).
Food, apuchan.
Fox, sup.
Girl, ila-pullup.
Give, to, allan.
Good, pallou.
Green, llin.
ILair, pe.
Hands, nen.
Head, tech.
House, zip, chip.
Husband, muluch.
Idols, izoz, ichoch.
Lance or dart, ulluc.

Louse, cullî.
Love, to, agollan.
my love, agole.
my lover, acoleuch.
Maize, cach.
Man (homo), iayu or hayu.
(male), nun.
(married), muluch.
Moon, pel.
Mollier, pan.
Mountain, sicrra, liman.
Nose, quexum.
Not, nothing, ma.
Place, to, amehan.
Red, llaca.
River, xocot.
Road, path, panâ.
Rule, to, capac (Kechua).
Sick, cama.
Silver, checho.
Son, pul.
Soul, zall or chall.
Spittle, ollê.
Stars, kenna.

Straw, dry grass, pusim.
Sun, muxac.
Teeth, my, alè.
Tongue, monzey.
Town, putam.
Water, cot.
White, chech.
Wife, zala.

Will, wish, men.
my will, amen.
I wish, ameñan.
Woman (female), ila.
ilajayu.
(married), zala.
Word, hil.
Tuca, el.

## IV.

## THE LECA LANGUAGE.

The Lecos of the river Beni have been erroneously included in the Tacana stock by D'Orbigny and later writers (including myself). The only material I have anywhere found of their language is a short vocabulary given in Weddell's Voyage dans le Nord de la Bolivia (Paris, 1859 ); but this is sufficient not only to take them entirely out of the Tacana group, but probably to place them in an independent position by themselves. As Weddell's book is not to be found in many libraries, I shall translate and rearrange his list of words and precede it with some remarks on the tribe and its jossible affinities.

The Lecos are stated by Weddell to have resided originally on the Rio Tipuani and its affluent, the Rio Isuaya, whence they removed to the banks of the Rio Mapiri.

On Arrowsmith's map (i8o9) the "Rio de Lecos" is located as a branch of the Rio Beni, between $13^{\circ}$ and $14^{\circ}$ South latitude, in a region assigned to the "Samachuanes," though I suspect these are the "Muchanes" of other writers, and who, according to Weddell, are Mozotenos.

The mission of Aten, in the valley of the Rio Beni, is distinctly stated by an official authority in the last century to have been peopled by the Lecos,* so we must include in them the "Atenianos," whom D'Orbigny classed with the Tacanas.

A somewhat extended comparison has not furnished me with positive grounds for including the Lecos in any known linguistic group. Most of the analogies I have noted are with the Carib stock, and some of them are striking, but scarcely decisive.

[^6]
## Leca Analogies.

Sun, he'no; compare bue'no (Opone, Carib stock).
Moon, kurea; comp. kede, siregu (Carib dialects).
Water, dua; perhaps from Carib tuna.
Arrow, uela; not far from Carib bouléouc.
Arm, bepel; close to Carib yapoule, japali.
Tooth, bikiri; nearly the same as the kxier and yeri of Caribs.
Heaven, kaut; almost identical with the Bakairi kxau and Carijona cahoue, both Carib dialects.
Legs, boo'te ; comp. Carib iebeti, beti.
I think it is safe to infer from the above comparisons that there is an infusion of Carib elements in the tongue ; but the material is too scanty to assign its true value.

According to a count made by the missionaries in $183^{2}$ there were about two thousand natives at the mission of Aten, all of whom we may assume were Lecos. Dr. Edwin R. Heath, who spent two years in the valley of the Beni about 1880 , does not mention them, at least under this name, and gives no specimen of their language.

In personal appearance the Lecos are described (by Weddell) as of pleasant expression, with straight foreheads and horizontal eyes, the mouth of medium size. In temperament they were frank and cheerful. What is unusual, they seemed totally devoid of appreciation or care for music, and had no dances or songs of any kind.

The alphabet of the vocabulary is the Spanish ; ii is the French $u$; $j$ as tschu in German.

## English-Leco Vocabulary.

Arm, bepel. Arrow, uela. Belly, baùuhobo.
Bird, katchu.
Blood, bile.
Body, bonodicheo'ro.
Bow, tchava'ta.
Child, yatchpaik.
Earth, lal.
Eyes, bisiri.
Fect, besel.
Fingers, biui.
Fire, moa.

Flower, tutha.
Forest, kanda.
Hand, bueù.
Head, barua.
Heaven, kaut.
House, uan.
Leaf, uoià.
Legs, boo'te.
Man, yubasa.
Milk, buchuluro.
Moon, kurea.
Mountain, uotha.
Mouth, bokòrua.

Nails (finger), biuità.
No, nai.
Nose, bitchinua.
Rain, essa.
River, dua (water).
Salt, tïj.
Skin, busutche.
Sun, he'no'.

Teeth, bikiri.
Tree, $b a^{\prime} t a$.
Village, ue's.
Water, dua.
Woman, tclusuaya.
Wood. hamon.
Yes, o-o.

## Numerals.

1, ber.
2, toi.
3, tchai.
4, didai
5, ber-tcha.
10, ber-bivque.
V.

## A TEXT IN THE MANAO DIALECT.

Two hundred years ago the Manaos occupied an extensive tract near where the Rio Negro empties its dark waters into the Amazon. They were, indeed, the most numerous accolents of the Black river on its lower course, and were estimated at something like ten thousand souls. Their large and shapely canoes and plastered conical dwelling houses bespoke a certain advancement in the arts, and their repute as daring warriors extended far among the Tupi tribes, who adjoined them on the Amazon.

They were not affined in blood or language to the Tupis, but belonged to what is now known as the Arawak or Nu-Arawak (or, as M. Adams prefers to call it, the Maipure) linguistic stock. In the early history of the country, their name is connected with the legend of El Dorado and the land of the Amazons. Later they willingly received religious instruction from the Carmelite missionaries, who gathered them in settlements. But the kidnapping Portuguese carried off many of the converts into slavery, and the remainder fled to the trackless forests, so that half a century ago scarcely a pure-blood representative of the tribe could be seen on the river.

Of their language there are but two specimens known to me; the one, a vocabulary of about 150 words, collected by the traveler,

Dr. Spix, and published in Martius' Glossaria Linguarum Brasiliensium; the other, a short catechetical work, which forms the material of this study, and which has never been printed. The original is in the British Museum, Manuscript Department, and bears the title:
"Doutrina christa'a pella Lingoa dos Manaos."
It has long been known to bibliographers, and is referred to by both Ludewig and Von Martius, but no one has copied or published any portion of it. Its authorship and precise date are unknown, but it has the appearance of a draft or copy of an older work, which it would seem was composed in 1740 . The orthography of the Portuguese words is somewhat irregular, and there also seems to be an uncertainty in the spelling of various native terms. The extract which I give is about one-half of the whole, and is sufficient to show the character of the tongue.

A comparison of the words of the text with those collected by Spix about a century later shows little change in the dialect, especially when the difference in the method of transcription is allowed for, the writer of the text having employed the phonetics of the Portuguese tongue, while Spix followed that of the German. To illustrate this, and also to facilitate the examination of the text, I append a list of some of the words in the latter, the majority of which are also found in Spix's vocabulary ; the latter I have placed in brackets and appended an $S$.

## English-Manao Words.

All, sabaque.
Always, lyxaöâri.
Be, to, salli.
Believe, to, yaniqui.
Belly, tuba (tula, S.).
Body, cacadyr (katy, S.)
Day, samaco (tzamâko, S.).
Die, to, matica (uamatika, S.).
Earth, etudeo (ete'e, S.).
Father, yracary (apakony, S.).
God, Iupa (mauary, S.).
Heaven, quinaucudeo (ghinauigota, S.).

Man, herenary (yrinâly, S.).
No, not, mehe (me'e, S.).
Our, us, öëne (huene, S.).
See, to, öâbata (pipata, S.).
Sins, larâyda.
Son, bauri, dayri (tany, S.).
Stone, k$\ddot{y} a ̈(g h u ̈ a, ~ S) .$.
Teach, to, caÿna.
Three, piaduqui (pialuky, S.).
True, caura.
Virgin, sabyra.
Where? padeura.
Why ? capeda.

Hell, caman latyma.
Most of these words are derived from roots extending through
many Arawak dialects, and are the property of that stem. Others, however, are borrowed from the Tupi. This is especially so with the word for God, Tupa, which is still in use in the Brazilian "Lingoa Geral."

The personal pronouns as given by Spix are :

I, no.
Thou, pi.
He, erouty.

We, huene.
You, yna.
They, nela.

The possessives, however, which are also employed in the conjugations as inseparable prefixes, differ from these. Thus we have :
> öè-mequer, our Lord.
> ồ-naca, like us.
> oà-yaniqui, we believe.
> ô-batar, we shall see.
> $p$ 'yaniqùi, thou believest.
> ba-batare, they shall see (him).

Doutrina christáa pella Lingoa dos Manaos.
P. De q'. sorte se ha de haver o homem neste mundo querendosse livarsse do inferno, e querendo hir ao ceo?
R. Crendo em Deos, fasendosse baptizar, i goardando sual ley.
P. Ha Deos?

IR. Ha.
P. Credes em Deos?
R. Cremos.

I'. Quem he Deos?
IR. O que fez todas as conzas.
P. Com que fez todas essas couzas?
R. Com hua' sua so'palavra.
P. Deus tem corpo como nos?
R. Nam tem.
P. Deos teue antiguameute principio?
R. Nam teve principlo.
P. Sempre soy?
R. Sempre.
P. Ha do ser para sempre?
R. Para веmдиге.
P. $\mathrm{Ca}_{\text {a }}$ peda lyanaqui samaco anaqui çamanna tyma gotia, öáu-aÿ-ÿápa que rey lÿüá kynaucuda diche lyoáỹá edaca ūêna?
R. Tupa yâquer cayta ca lygara auaquyra.
P. Auâỳnî ca Tupã?
R. Auûÿnâca.
P. Pyanŷqui Tupā?
R. Oâÿániqui.
P. Capaçay Tupi?
R. Sabaqui bayqui tumaquer.
P. Capâ üy̆na pura' Tupā tuma bayquê subayque?
R. Lygâra üÿnapura.
P. Cacadÿra oêníca Tupā?
R. Mehê cacaliurÿ.
P. Cutuquir ha quer rira bauy. napu Tupã?
R. Melı̂ eatuquinlıaqueri.
P. Lyxuöârl suhlr?
R. Ly xaöâri.
P. Buyrichipâ sahil lideuri?
R. Bnyriclie.
P. Aonde esta Deos?
R. No ceo, e na terra em todo o lugar aonde chamāo por elle.
P. Pode o homem ver aqui a Deos?
R. Nam pode ver.
P. Porque?
R. Porque nam tem corpo.
P. Aonde o hemos de ver?
R. No ceo hindo nos la.
P. Eos que sorem ao Inferno nam o liao de ver?
R. Nam o hao de ver.
P. Por que rezam?
R. Em castigo desus culpas.
P. Padeura sahi Deos?
R. Quinancndeo, etedeo sabaqui panoquer deo, padeno oâcaŷta.
P. Sabÿra sahi oâbata caÿdêo Tupā?
R. Mehe sabi oâbatar.
P. Caÿpeda?
R. Mehe cacasÿr.
P. Padire öâbatar?
R. Guinacuda dixe guareda öâbatar.
P. Bamane camanhatyma diche gareda babatare?
R. Mehe babatare.
P. Capedi?
R. Mehe baÿaligara gata öéneÿninique.

## Preguntas sobre a SS. Trinidade.

P. Quantos Deoses ha?
R. IIu sō Deos verdadero.
P. Sendo pessoas quantas sāo?
R. Sam tres.
P. Como se chamao essas tres pessoas?
R. Deos Padre, Deos filho, Deos Espirito San10.
P. Aelle se chama santissima Triuidade ?
R. Aclle.
P. Porque rezam?
R. Porque em hu so Deos estam tres pessoas.
P. Esse Deos Padre, Deos Filho, Deos Espirito Santo he o mesmo Deos?
R. He hu so e o mesmo Deos.
P. Em quanto pessoas he a mesma pessoas?
R. Nao: emquanto pessoas Deos Padre he differente, Deus filho he differente, Deos Espiritu santo he differente.
P. Qual dessos pessoas antigam ${ }^{\text {to }}$
P. Paquiby Tupa?
R. Baúraÿma Tupa caúra.
P. Paquiby lideno paquibÿ.
R. Pyaduqui baduqui.
P. Capacapa mara qui-ÿo piadu. qui baduqui-ÿú?
R. Tupan ÿracâry, Tupan bauri, Tupan Espirito Santo.
P. Lysciniqui oena ss. Trinde macûy?
R. Lyxiniqui.
P. Capeda?
R. Baûray̆ma Tupa lyanaqui pyaduqui baduqui liûri.
P. Baturayma liöari Tupa lÿ Tupa yracâry Tupa bayri Tupa Espirito Santo.
R. Baûraÿma Tupa öárÿ,
P. Baûraÿmara sahi lideo baura?
R. Maÿcadi ; bauraymarara Tupa yracari, äÿúnaca Tupa bauri äúÿnaca, Tupa Espirito Santo äúÿnaca.
P. Padeuora lypa bauÿnapu lypa
soy pro, Deos Padre soy pro ou Deos filho ou Deos Espirito Santo?
R. Nao soy pro nen hum todos sempre foram.
P. Qual dessos pessoas antiguam ${ }^{\text {te }}$ foy a q. se fez homem como nos?
R. O mesmo filho de Deos.
P. Como se chama o filho de Deos depoy de feyto homem?
R. Nosso senhor Jesus Christo.
P. Por isso he, que os Christāos tomaram este nome?
R. Por isso.
P. Que quer dizer Christaos?
R. O que he bapti zado, entre em Jesus Christo filho Deos.
P. Deyxou antigamente $N$. S. Jesus Christo outra pessoa em suo lugar antez de hir ao ceo?
R. Deyxou s. Pedro e todos os Papss seos successores pa governarem a santa madre Igresia Catolica de Roma assim chamada.
P. Que couza he Santa Madre Igresja Catolica de Roma?
R. Sao todos os que sao baptiza. dos, e estao pela palavra do summo Pontifex Papa de Roma, e agvarlao e creem em Jesus Christo.
P. Quem e nosso senhor Jesus Christo?
R. Verdadeyro Deos, e verdadeyro homem, como nos.
P. Como he verdadeyro Deos?
R. Sendo verdadeyro filho de seo Padre.
P. Como e verdadeyro homem.
R. Sendo verdadeyro alino da sempre virgem Marin.
P. Deos fllho tem corno como nos?
18. Ten corpo.
P. Quem ferantigamente o corpo de nosmo Senhor Jesus Christo?

Tupa yracary lypa oácaru Tupa bauri oácaru Tupa Espirito Santo?
R. Mehe lyaquyra quariry.
P. Capa bauynâpe qui-yo piaduquy baduqui di lixir ; herenari cauraŷ eâanady oênâke?
R. Tupan baÿri.
P. Capaçay Tupa bauyri-y lierenari caurarÿ tūminhâne garêde?
R. Oëmequer Jesus Christo.
P. Lÿgâyqui câÿta Christaos?
R. Lÿgâÿqui.
P. Capaçây caytâca Christaosly ?
R. Tupan bây̆ri catÿâca Jesus Christo eÿáquêr.
P. Nemêda dipa baunâpe öémequer Jesus Christo baura öé cuniapây quinaucuda lixyra gereda f gataÿa?
R. Nemêda S. Pedro sabaque Paÿ abarepano mâr Simani caÿdixí santu madre Igreyja catholica mequêr-ey Papa de Roma öácâÿta.
P. Capacay Santa Madre Iga Catholica de Roma?
R. Sabâque caÿtâca Jesus Cbristo eyaquer ligâra abarepano mar Papa de Roma gama anaguŷra.
P. Capacay öémequêr Jesus Christo?
R. Tupan caura, herenari caura, aีénâca.
P. Capeda Tupa caurâỳri?
R. Tupa ỳrâcari bâyrinÿo.
P. Capeda herenari cauraÿri?
12. Santa Maria ababycagoereÿma dâyri caurayri.
P. Cacadÿra ̈̈enaque Tupa dayri?
12. Cacadÿra.
P. Cupabnüỳnapa סómequer Jesus Christo carytummquer?
R. Nen huma pessoa, o fez por graça o por obra do Espirito santo foy feylo.
P. Aonde foy feyto?
R. No ventre de hua donzella chamada Sauta Maria.
P. E essa Santa Maria ficou sem lezao assim como otra qualqer virgem que nunca parió?
R. Nem mais nem menos.
P. E depois de parir filou sem lezam?
R. Nao teve lezao ficou sempre virgem.
P. De que sorte se houve N. S. Jesus Christo neste mundo de nascer de sua santissima may?
R. Padeceo fo mecede e canpaço e todos os malles de pena por amor de nos f por nosso amor.
P. Easinou antigamente N. S. Jesus Christo dando entendimento á gente ?
R. Ensinou.
P. Ao depoiz morreo na cruz por nos, em paga de nossos peccados?
R. Morreo.
P. Por amor q. ${ }^{\text {em }}$ morreo?
R. Por amor de nos, por amor de nossos peccados, ou satyfuçum delles, ${ }^{\text {al }}$ livarnos do Infierno, e levarnos ao ceo.
P. Por sua vontade?
R. Por sua vontade morreo.
P. Pois elle nāo hera Deas?
R. Hera Deos.
P. Pois esse morreo?
R. Nío : o corpo qetomou de sua santissima may he $q^{e}$ morreo.
P. Nīo havia mos de hir ao ceo, se elle nam morrera?
R. Nao havia mos.
R. Mehe capâtomâr Tupan Espirito santo tuma quenda dêo letuminha f graça tumaquenda dêo letuminha.
P. Padêuora sâhi liâôná?
R. Lÿmâque sabỳra Santa Maria caÿra ababycago erëỳma tuluadêo.
P. Lyden-o Santa Maria enidagareda sabyray ababŷ cagoerëyma mehê runida aguŷra sayro?
R. Lÿaquira öárÿ,
P. Lucâóánîquy pura lûy nidan gaıêda?
R. Melê̂ rupûta.
P. Capêda öémequer Jesus Christo ÿma samâco anaquŷa ly̆racâro gatia ly̆nidan gaıêda tay̆âpa paÿni gaıêda?
R. P'óátŷ ŷlûri metatŷr pe le ly poŷta sabâque bayque pura ly tâ ba ö ä cadŷ che.
P. C ay̆na datîr bađÿnapû io ë mequer Jesus Christo Lita ecalâya nitia herenari ÿchÿ?
R. Recaÿnâda.
P. Guayneŷpa remotîca cruza quadia ö ämâne barâyda öëncÿ ?
R. Matîca.
P. Capeda rematîca?
R. Oágâyque ïámâne baûtyda öënêy̆ camânha tymagatî́ o a u güŷ yâpaquer quÿnâudâ lixira eda cây. dây.
P. Pananêy?
R. Pananêyra rematica.
P. Mehê saÿhe Tupaly?
R. Tupá.
P. Lydêu-ora Tupā malîca?
R. Mehê ; tupá maîca caca rỳra liracâro lyxîra ba çua lyöäri matî. cadŷ.
P. Mehê éáma quynaucudâ diche mehe ö á mâtîca garêda ?
R. Mehê üáma

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P. Quantos dias estenne N. S. Jesus Christo debayxo da terra no teo sepulcro de pedra?
R. Tres dias.
P. Era depois como passou?
R. Resuscitou.
P. Depois de resuscitar como se houve?
R. Subio ao ceo depois de 40 dias.
P. De que sorte se ha, ou esta agourla?
R. Esta asentado à man direyta de Deos Padre tao honrado e estimado como clle.
P. Paquÿby samâco öemequêr Jesus Christo lideo rimaticâni garêda etê üÿn â pudēo kÿá anaquÿa.
R. Pyaquîbaquî samãco.
P. Guayney padeura?
R. Caydêu-o ocâry.
P. Caydêu-o ocitry guaynèy padêury ?
R. Lycuruca iquinaudadire 40 samâco buûtiquêy.
P. Paquŷpa sahe cachadir lidêury ?
R. Tupan yrâcâr sabŷdi libaurây quidêu-o: subinha: aquidi câura ymüèta pyrama.

## VI.

## THE BONARI DIALECT OF THE CARIB STOCK.

The last of the Bonaris died about 1870 . At one time they were a tribe of considerable strength, having their homes in the thick forests along the river Uatumā, which empties into the Amazon from the north, not far below the mouth of the Rio Negro. They were, therefore, neighbors to the Manaos, whose location I have already described.

They were a docile people, and readily collected around the mission Father Nuno Alvarez de Couto established at Sant' Anna do Atuma. There, however, they fell victims to various diseases brought by the whites, and when Canon Francisco Bernardino de louza visited them, of all the tribe only one old woman survived who was able to give him the words of its speech. These he published in his book, Para e Amazonas (three parts, Svo, Rio Janeiro, 1874-5), which is scarce outside of Brazil, and from which Dr. A. Ernst, of Caracas, obligingly copied for me the vocabulary which I subjoin.

The name of the tribe is taken from the Tupi language or Lingoa Geral of Brazil, and in its proper form Boa-n-uara means "snakemen" or "serpent-people." Other boanari or snake-men are mentioned, one band on the river Uaupes (Von Martius) and another on the river Içanna (Natterer). It was a term probably derived from the totemic sign, or perhaps from some accidental or fancied peculiarity, and has no ethnic significance.

Even a slight examination proves the Bonari a well-marked Carib dialect, and as such it is correctly assigned and located on Karl von den Steinen's linguistic map inserted in his work, Durch Central Brasilien. The only word, however, which he gives from their dialect, keri, moon, is not quite correct, according to this vocabulary.

## English-Bonari Vocabulary.

Air, cabu.
Arrow, purena'. Black, tapaiuna.
Bow, urapa'. Brother, mimien. Cold, tecominhoa'. Dance, timiara. Ear, panare'. Earth, nono. Eye, nuruba'. Fire, uatu. Fish, uutu. Girl, meacaba'. God, tupan. Grandfither, tamunbā. Head, iriopo'.
Heat, atupeua'.
Heaven, maica-paa.
House, abeno'.
IIusband, unhô.

Infant, pitianhea.
Light, ataquice.
Man, uquere'.
Moon, quecê.
Old, tapoucu'.
Old woman, nafoucu'.
Rain, cunoba.
River, tuna' (see Water).
Son, child, meco'.
String, ubudiana.
Sun, usiu'.
Thunder, darara'.
Tooth, jurê.
Uncle, uemi.
Water, tuna.
White, tiada'.
Wife, upuiten.
Wind, iriane'.
Woman, uauri.

The influence of the neighboring Tupi tribes is seen in such words as tupan, God; tamunh $\bar{a}$, grandfather; urapa', arrow (urapa'ra, Tupi) ; tiada, white (ti, Tupi) ; tapaiuna, black (tapanhuna, Tupi), and a few others more faintly. These are loan-words which do not affect the mass of the language.

## VII.

## THE HONGOTE LANGUAGE AND THE PATAGONIAN DIALECTS.

Among the manuscripts in the British Museum there is one in Spanish (Add. MSS., No. 17,631), which was obtained in 1848 from the Venezuelan explorer, Michelena y Rojas (author of the Exploracion del America del Sur, published in 1867). It contains
several anonymous accounts, by different hands, of a voyage (or voyages) to the east coast of Patagonia, "desde Cabo Blanco hasta las Virgines," one of which is dated December, 1789. Neither the name of the ship nor that of the commander appears.

Among the material are two vocabularies of the Tsoneca or Tehuelhet dialect, comprising about sixty words and ten numerals. These correspond closely with the various other lists of terms collected by travelers. At the close of the MS., however, there is a short vocabulary of an entirely different linguistic stock, without name of collector, date or place, unless the last words, "á la Soleta," refer to some locality. Elsewhere the same numerals are given, and a few words, evidently from some dialect more closely akin to the Tsoneca, and the name Hongote is applied to the tongue. This may be a corruption of "Choonke," the name which Ramon Lista and other Spanish writers apply to the Tsoneca (Hongote $=$ Chongote $=$ Choonke $=T$ sīněca).

The list which I copy below, however, does not seem closely allied to the Tehuelhet nor to any other tongue with which I have compared it.

The MS. is generally legible, though to a few words I have placed an interrogation mark, indicating that the handwriting was uncertain. The sheet contains the following :

Descripcion del Indio.

| Caveza, | scyocup. |
| :--- | :--- |
| Frente, | eyssen. |
| Ojos, | can. |
| Orejas, | couna (qy. coaua, |
| Narizes, | bacsen. |
| Cejas, | suman. |
| lBoca, | zuzin. |
| Dientes, | idis. |
| Pescuezo, | saislan. |
| 13razos, | cheslan. |
| Manos, | cupa'ches. |
| Dedos, | gulyocoye. |
| I3arriga, | coult. |
| Muslos, | cucu'. |
| Pierna, | cuxin. |
| 1'ie, | puxasen. |
| A lus conchas, | chuvin (?). |
| Cuchillos, | chuvi. |


| 1, | pa. |
| :---: | :--- |
| 2, | su. |
| 3, | chalas. |
| 4, | bok. |
| 5, | ciechs. |
| 6, | tesan. |
| 7, | zohs. |
| 8, | tachs. |
| 9, | teus (?). |
| 10, | $o^{\prime}$ pen. |
| No le he podido enteuder mas. |  |
| Canoa, | tasabay. |
| Canalete, | asaup. |
| Toda clase de botones, | coyocuy. |
| Abalorios, | jamts (?). |

## A la Soleta.

'The above list I translate and arrange in alphabetical order as follows :

Arms, chestan. Mands, cupa'ches.

Beads, jamts (?).
Belly, coyu'.
Buttons, coyocuy.
Canoe, tasabay.
Ears, coana (or cooua).
Eyebrows, suman.
Eyes, ean.
Fingers, gaayocoye.
Foot, puxasen.
Forehead, eyssen.

Head, seyocup.
Knives, chavi.
Leg, euxin.
Mouth, zuzin.
Neck, saislan.
Nose, bucsen.
Paddle, asaup.
Tceth, idis.
Thighs, cava.

The other vocabulary, although it presents the same numerals, differs widely in some of the words. It gives :

Fire, kanikerk.
Water, cuk-hin.
Sun, keker.
Woman, becok.

Eyes, kavak.
Lars, kakuk.
Mouth, kakhe.
Tongue, kukshlüt.

These are more closely akin to other Patagonian dialects than the words of the former vocabulary.

It must be acknowledged, however, that we are but poorly supplied with information about the tongues of Patagonia and Tierra del Fuego. In the latter country we have, indeed, sufficient material in the Yahgan, thanks to Brydges, Adam and others; but in
the Onas tongue there is practically nothing and but little of the Alikuluf.

It is still uncertain whether the last mentioned is a branch of the Yakana-cunny, and whether these latter in turn differ from the true Patagonian or Tehuelhet.*

D'Orbigny insists that the Puelches, who have for a century and a half occupied the plains between the Rio Negro and the Rio Colorado ( $39^{\circ}$ to $41^{\circ}$ lat. South), are radically different in language both from their Aucanian neighbors to the north and the Patagonian tribes to the south. $\dagger$ For this reason they are called by the Araucanians Quimnolu-che, "People who cannot understand." $\ddagger$ D'Orbigny's short comparative vocabulary of the "Patagon" and "Puelche" certainly reveals a wide difference, but a comparison of the few words of "southern Puelche" collected by Hale discloses unmistakable identities between the two idioms, as:

| S. Puelche. | Teiruel-het. |
| :--- | :--- |
| s\%alela, | tsōkalela. |
| apa, | opuk. |
| ohatsk, | ohit. |

Mr. Hale collected his vocabularies at Carmen, on the Rio Negro; and the influence of the northern tribes is distinctly visible in them. Especially the Guachi would seem to have percolated into them. The possessive pronoun of the first person singular, ia or $y a$, " my ," is seen in both Hale's vocabularies and a!so in D'Orbigny's Puelche. It is common to the Tsoneca or Tehuelhet and the Guachi.

|  | GUACHI, | TEir. or Puelche. |
| :--- | :--- | :--- |
| Nose, | ia-note, | ia-nots. |
| Water, | auak, | yagup. |
| Mouth or lips, | ia-pé, | ia-pell. |
| Teeth, | ia-va, | iu-lai, |
| Mountain, | tegec-loan, | atecq, yuilhuana. |

The Poyas or Pey-yus are stated in the Informe of Gencral Pietas, above quoted, to have dwelt (in 1729) from the river Lauquen-leufu one hundred leagues southward and quite to the Atlantic. Twentyfive years ago Guinnard found the "Poyu-che," as he calls them, wandering along both banks of the Rio Negro from Pacheco Island

[^7]to the Cordilleras.* The words he gives from their tongue-if they can be depended upon-prove it to be an Araucanian dialect.

Of the Chonos, who were a maritime people on the west coast, we have no linguistic material ; nor can we define the relationship of the Calen and Taijatef, who resided on the shore south of $48^{\circ}$ and spoke one tongue.

In the following table I present a comparison of a limited number of common words in Patagonian vocabularies, beginning with the earliest-that collected by Magellan on his first visit to the straits that bear his name, in 1520 . It is interesting to note how little the language has changed in the nearly four centuries which have passed since that period. The list is found in Pigafetta's narration.


[^8]| Dialect. | Author. | Mouth. | Nose. | Tongue. | TортіI. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Patagonian, <br> 2. <br> 3. <br> 4. <br> 5. <br> 6. Tsoneea, <br> 7. Choonke or Tehnelche, or <br> 8. Tehuelhet, <br> 9. Puelche, <br> 10. <br> 11. Hongote, <br> 12. <br> 13. Tekennika (or Yahgan), <br> 14. Alikuluf. | Plgafetta. <br> Ms. Br, Mus I. <br> MS. Br. Mus. II, <br> Martius, <br> D'Orbiguy, <br> Hale, <br> Musters, <br> Lista, <br> Hale, <br> D'Orbigny, <br> MS. Br. Mins. I, <br> MS Br. Mus. II, <br> Brydges, | ihum, iapulk, <br> shahan, iapolk, zuzin, dakhe, | or, <br> 6 , <br> oo, <br> ho, <br> ianols, <br> tchal, <br> or, <br> ianit, <br> bacsen, <br> cushush, nohl. | scial, deol, del, del, <br> tal, <br> iawonōk; <br> kakshlut, <br> lŭn, luckin. | for, <br> jor, kor, <br> kurr. <br> curr, <br> jor, <br> iaxıia, <br> örr, orre, ia hai, <br> idis, <br> $t u^{\prime} u n$, cauwash. |
| Dralect. | ctior. | Hand. | Fоot. | House. | One. |
| 1. Patagonian, <br> 2. <br> 3. <br> 4. <br> 5. <br> 6. Tsoneea, <br> 7. Choonke or Tehuclche, or <br> 8. Telanelhet, <br> 9. Puelehe, <br> 10. <br> 11. Hongote, <br> 12. <br> 13. Tekenulka (or Yinhyan). <br> 14. Alikuluf. | Pigafetta, <br> MS. Br. Mus. I, <br> MS. Br. Mus. II, <br> Martius, <br> p'Orbigny, <br> Hale, <br> Musters, <br> Llsta, <br> IIale, <br> Inorhigny, <br> MS. Br. Mius. I. <br> MS. Br. Mus. II, <br> Brydges, | chené (cori, fingers), jan, ore, ore, fan, chémé, <br> tsicc'r, <br> ia sk'rp, is paye, cupaches, <br> jösch, yисcaba. | kel, <br> kel. <br> keal, <br> $t i$, <br> shankence, alj, iapgit, <br> pasasen, <br> coleen, cutliculcul, | cocha, cochn, cocha, <br> kou, ahoike, <br> ukkral, hutt. | jauken, cheuken, chenguen, <br> tçic, <br> chushe, choche, tçi, <br> $p a$, <br> $p a$, <br> ocoale, towquidow. |
| jialect. | Author. | Two. | Tumee. | Four. | Five. |
| 1. Patagonlun, <br> 2. <br> 3. <br> 4. <br> 5. <br> 6. Tsoneca. <br> 7. rhoonke or Tehuelche, or <br> 8. Ti-huelhet, <br> 4. I'uelehe, <br> 11. <br> 11. IJorkente, <br> 12. <br> 13. Tekennika (ior línhgen). <br> 11. .Ilkuluf. | Pigafetta. <br> NS. Br. Mus. I <br> MS. 13r. Mus. IT, <br> Martlus, <br> J'()rbiguy, <br> Itale, <br> Musters, <br> J.lsta, <br> Hale. <br> D'Orbigny, <br> Ms. Ibr. Mins. 1 . <br> Ms. 13r. M118. 1I, <br> Brydges, | keukay, xeukay, <br> pöetçi, <br> houke, <br> jouke, <br> pe tçl, <br> 8a, <br> 8: <br> combabs, <br> tetkcow. | kear. <br> keash, <br> kiash, <br> gotsk, <br> a ${ }^{\circ}$ <br> knash, göt, <br> chatur, cheles. <br> mutta. cup'eb. | kekugue, <br> kekagui, <br> Rekaguy, <br> mala, <br> errge, <br> kngue, <br> mala, <br> bok, <br> bot, <br> carga, <br> ficulaba. | kaszen, <br> keitzun, <br> kegtzun, <br> tanka, <br> kisin, <br> tam. <br> tonke, <br> cicclis, <br> clech, <br> cup'aspa. |

## Notes on the Vocamulary.

Mran. - The root in all the allied Tsoneca dialects is ken, kin or kurn, which is the generic term for the species homo. It is seen
with a feminine prefix in iamo-kan-ok, kärken, ackhanash (=wa-kan-ash). The English form of this root becomes cunny, found as a suffix to various tribal names.

Woman.-Zunuun = woman, as zunum nakon, ugly woman; zunum kekalun, girl, young woman; iama or yama means properly " mother;" ache or ysher (Musters) is a woman of the same gens, the masculine form of which is chen, brother; karken is a married woman.

Sun and Moon.-The two prevailing roots are kar and shuin. They both appear in Pigafetta's calexchem (=kare-shuin). The vocabulary No. 2 translates kora as "sun, heaven, God." The generic term for both orbs is shuin (chuina), which seems allied to the Araucanian cuyen of the same meaning. The Hongote ke-kar shows the radical kar. Another radical for both orbs is the guttural sound variously represented by kok, cuc, yok, keng, geng, sheg. According to Brydges the Yahgans have two different words for sun, hum and usteca, and two for moon, annuca and hunian.

Fire.-The radical sound appears to be 'aua\%, spelled variously yaik, hauak, kauik, etc. The first syllable is visible in maja $=$ ma. ya\%.

Water.-The term jarra or karra means "drinking water," from jara, to drink; iagop is rain water (ciagop, rain, Hale); the léy and lehe of Musters and Lista appear to be an abbreviation of the ho $l i^{\prime}$ of Pigafetta.

Head.-Pigafetta's her $=$ hel, which is a variant of guil, dil, etc. Another radical for the idea is a guttural, ' $\chi a$, which is at the base of ia'oe, the Hongote se-yocup, Yahgan luka-be, etc. (comp. Araucanian lonco, head).

Eye.-All the words are clearly related except the Hongote.
Ear.-The term given by Pigafetta, sané, is repeated with slight variation in the various dialects including the Hongote, except the Fuelche, where Hale and D'Orbigny give a different word. The verb choinqué, to hear, seems related to shené, ear.

Mouth.-Wide discrepancies appear in the terms for this organ. The words chian, shahan and ihum are probably forms of shum, which is the right word for mouth, while ia pelk, according to Hale, means " my lips."

Nose.-The general root is a modification of $\tilde{o}$, Lista's or $=o b$, which reappears in tochal, nōhl, etc.

Tongue.-Pigafetta's scial reappears in Muster's tal, etc. PROC. AMER. PHILOS. SOC. XXX. 137. L. PRINTED MARCH 18, 1892.

Tooth.-The prevailing radical or may be related to Araucanian or, bone.

Hand.-Two conceptions are conveyed by the words presented, che'mé, che'né, jan, fan, all forms of the same = upper extremity, arm and hand; while or, cori, tsic-c'r, ya-s'k'cup all refer to the fingers.

Foot.-The general root kel probably reappears in 'alj, and even in shan-kence ( $=$ chen-kels, lower extremity), cutli-kulkul, etc.

House.-The root is generally ko' $a$.
Numerals.-These display considerable diversity. Several are merely borrowed from the Araucanian, in which we have: 1 , quiñe; 2, epu; 3, cula; 4, meli; 5, kechu. From kechu, for instance, comes Hongote ciech, Tel. keitzun, tzen, etc. Hong. chalas probably $=$ Tel. $k a-a s h ;$ Hong. $s a=$ Tel. $t_{c} i$, etc.

The general conclusion to which these comparisons lead is that the Patagonian dialects are probably more closely 'related than has hitherto been assumed.

## VIII.

## THE DIALECTS AND AFFinities OF THE KECHUA LANGUAGE.

At the time of the discovery, and probably long before that date, the Kechua language was spoken along and near the Pacific coast from $3^{\circ}$ North to $35^{\circ}$ South latitude, that is from the Rio Ancasmayu in Ecuador to the Rio Maule in Chili.

Of course, in this long extent of nearly twenty-five hundred miles of mountains and deserts, there was considerable variety in its dialects; but, so far as I can learn, much less than might be expected at first sight. The Abbé Camaño, a learned Jesuit who traveled extensively in Peru about the middle of the last century, and whose Elementi della Lingua Quichua has never seen the light in print, classified the tongue under five dialects as follows:

1. The Chinchasuyo, spoken in the diocese of Lima.
2. The Lamaño, spoken about Lamas, in the diocese of Truxillo.
3. The Quiteno, current in and around the city of Quito.
4. The Calchaqui or Tucumaño or Catamareño, which prevailed west of the Cordillera in the province of Tucuman.
5. The Cuzcuano, in and around Cuzco.

Of these the last mentioned is that which is considered the
classical, and was adopted by the missionaries as representing the language in its purest and most ancient form. In it the drama of Ollanta was composed, which is justly regarded as one of the finest productions of American aboriginal literature.

The identification of the Calchaqui dialect of Tucuman with a patois of the Kechua would settle a vexed question in American ethnography and archæology. The language and the nation of the Calchaquis have long since disappeared; but their material relics, in the shape of well-constructed walls of dressed stones, tombs of the same material, ornaments and images in copper and gold, and handsomely decorated jars of earthenware, still remain in sufficient abundance to testify to a condition of culture among them rivaling that of the Kechuas of the western slope of the Cordilleras.*

The learned traveler, Von Tschudi, imagined that their tongue was the modern Atacameño, and that these sparse inhabitants of the desert were descendants of refugee Calchaquis. $\dagger$ But there is no actual evidence to this effect.

Florentine Ameghino, who has done so much for our knowledge of the Argentine Republic, claims the Calchaqui as a dialect of the Aymara tongue of Bolivia; $\ddagger$ and the two latest writers on the subject, S. A. Lafone Quevedo and Dr. H. von Ihering, are equally at issue in their opinions. The latter insists that the Calchaquis spoke an idiom wholly different from either Kechua or Aymara; § while the former argues that this extinct tongue was " not exactly Kechuan, but not altogether distinct " from it, and was a mongrel dialect made up of Kechuan, Abiponian and Guaranian elernents.||

When we turn to the old authorities the point is by no means cleared up. The first and best who states anything definite is the Jesuit missionary, Alonso de Bárzana (sometimes written Barcena), whose letter from "Asuncion del Paraguay," dated September 8, 1594, gives some pertinent particulars. He writes: "The most widely extended languages (in Tucuman) are the Caca, the Tonocote and the Sanavirona. The Caca is spoken by the Diaguitas and throughout the valley of Calchaqui, and that of Catamarca, and in most of the district of Nueva Rioja. Nearly all the towns

[^9]about Santiago use it, as well as the natives along the Rio de Estero, and many more who live in the mountains. I have prepared a grammar and vocabulary of this language."*

These statements assign a distribution of the language over an area about 450 miles from east to west, and 300 miles from north to south. It is highly unlikely that so widespread a tongue should utterly disappear while so many of the descendants of those who spoke it still survive. Yet the native population of Tucuman today speak only a corrupt Kechua dialect, when not Spanish. In fact, the name applied to the tongue by Barzana, kaka, is the Kechua word for mountain, and signifies in this connection the dialect of the mountaineers.

The grammar and vocabulary he prepared are lost, and we have no monuments of the language remaining, except the geographical and other names mentioned in the early writers or preserved on old maps. In examining these one is at once struck with the numerous names of villages ending in -gasta. These are found from the Rio Salado to the Cordillera, and from about $26^{\circ} 30^{\prime}$ to $31^{\circ} 30^{\prime}$ South latitude; in other words, in just about the area assigned by Bárzana to the Caca tongue.

I quote some of them:

| Ambargasta, | Guanagasta, |
| :--- | :--- |
| Amingasta, | Machigasta, |
| Auguagasta, | Paquilagasta, |
| Cahgasta, | Tinogasta, |
| Calingasta, | Tuquiligasta. |
| Chiquiligasta, |  |

I do not think there can be any doubt but that this gasta is a corrupted form of the Kechua llacta, town or village. In pure Kechua there is no $g$ sound, and the $c$ is a guttural (German $c h$ ); so that a rough equivalent in the Spanish alphabet would be close to gasta. Moreover, many of the syllables preceding the termination are evidently Kechua, as:

Cahgasta = eaja llactu, cold town ; an approptiate name, as it lies high up the Cordillera on the Rio de Limari.
Auguagasta 二aucen llacti, encmles' town ; oceupied by hostile people. Calligasta cenli llacta, henlthy town ; probably from its salubrious site.

[^10]Machigasta $=$ macchiy llacta, washing town, place where large solid things are washed ; quite suitable to the village of the name on the eastern end of Lake Andalyala.

The Kechua origin of these names is plain. But if the Caca or Catamareño, as it is sometimes called, was merely a dialect of the Kechua, why did Bárzana speak of it as a separate tongue? Possibly because the differences in sound were so great as to render it unintelligible to a person familiar only with the dialect of Cuzco.

For the present the evidence seems sufficient to consider the Calchaquis a more or less mixed branch of the Kechua family, and the supposition formerly advanced by myself and others that they constituted an independent stock seems unwarranted.

The Quiteño dialect was held by Von Tschudi to present features of higher antiquity than that of Cuzco. So far as I know, there are few published specimens of it.*

The Chinchasuyu or Chinchaya dialect, also one of the northern branches of the tongue, has been sufficiently analyzed by Von Tschudi in his work on the language, his materials being drawn from the Appendix to the second and third editions of Diego de Torres Rubio's Arte de la lengua Quechua, and from the manuscripts of the German engineer, Hermann Göhring. $\dagger$ He finds the pronunciation softer. Certain differences in the verbs appear, in part, to be neologisms. And there is a rather large number of words which are wholly diverse in the two dialects.

The Lamaño is said by Von Tschudi to be clusely allied to the Quiteñ̃o, but he acknowledges that he was not personally familiar with it.

Whether the Incas, that is, the gens from whom the war and peace chiefs were selected, had a language or dialect peculiar to themselves, as asserted by Garcilasso de la Vega-and by nobody else-has been again brought up for discussion lately by Dr. E. W. Middendorf. He maintains that they had, and that this secret language was the Aymara. $\ddagger$ This he does in the face of the fact that every one of the eleven words which Garcilasso quotes from this mysterious tongue turns out either to be pure Kechua or from a

[^11]Kechua radical.* Dr. Middendorf holds his opinion not so much on the evidence, as to support his favorite theory that the Kechua civilization was derived from the Aymaras and that the Inca gens was of Aymara descent. Unfortunately, he has not acquainted himself with the real constitution of the Kechua social system. It has been ably and satisfactorily analyzed by Dr. Gustav Brühl $\dagger$ and later by Heinrich Cunow. $\ddagger$

The precise relationship of the Aymara language to the Kechua has received considerable further elucidation through Dr. Middendorf's recent studies. He supplies a list of about five hundred and seventy words, which have approximately the same form and sense in the two tongues, and a second list of about one hundred words which are alike in form but with more or less variation in sense. There is also a strong phonetic likeness between the tongues, and their grammatical characteristics approach each other. His conclusion is that "Aymara and Kechua are sister languages, but are like children of mixed marriages; for while they agree in their essential nature (in ihrem Wesen) quite to the most trivial peculiarities, yet in external grammatical form, as well as in the larger part of their vocabulary, they are wholly asunder." §

This is substantially the conclusion reached by that master of linguistic science, Prof. H. Steinthal, who has ably explained the identities and diversities of these two tongues on principles of the general philosophy of language.||

It is probable that further light would be thrown on this question, so interesting for the information its settlement would yield on the origin of Peruvian civilization and the archeology of the region around Lake Titicaca, were the comparison instituted between the oldest, and therefore purest, forms of the two tongues; and it is partly to call attention to some rare or unpublished materials suitable for this purpose that I have introduced the subject.

[^12]Assuming with most Kechuists that the trend of migration was from north to south, we should look towards the north for the oldest forms of the tongue. This, as I have said, Von Tschudi did; but both he and Dr. Middendorf state that they had not seen the work on the Quiteño dialect printed at Lima in 1753 , nor apparently any MS. on the structure of the northernmost branches of the tongue.

A vocabulary is mentioned by Von Tschudi, dated in 1814 , which gives words of the idiom as spoken in the dioceses of Maynas and Ucayali.

This could be supplemented by a later MS. in my library, containing a Diccionario castellano-inga (y inga.castellano) segun se habla en las montañas limitrofes del Ucayali and a Gramatica del idioma Inga acomodado al modo de hablar de los manoitas y Maynas. It is dated 1868, and the author is given as Fr. Mariano Castellanzuelo ; but it appears, in part at least, to be founded on some earlier work.

A comparison of this MS. with the grammars of Von Tschudi and Middendorf shows that the dialect of Maynas, the most eastern of all the Kechua dialects, is more closely akin to the Cuzceño than to the Quiteño, both in vocabulary and structure. It does not present the terminal $n_{s}^{\sigma}$ a to the verbal stem, common in the latter. In vocabulary it is nearer the classical Kechua than to the Chinchaya; for example:

| maynas. | Keciua of cuzco. | Chinchaya. |
| :--- | :---: | :--- |
| llacta, | llacta, | marca. |
| uma, | uma, | peka. |
| yacu, | unu, | yacu. |
| uchuccla, | huchuccla, | ikchiccla. |
| chire, | chiri, | calhcha. |

For the Aymara, the comparison should be made with its purest form. This was confessedly the Pacasa dialect and not the Lupaca, in which the Arte and Diccionario of Bertonio were composed. At present, although the distinction between the dialects has been in a measure erased by the facilities of modern intercourse, there remain extensive variations both in grammar and vocabulary.* The excellent work of Dr. Middendorf is founded on what purports to be the Pacasa; and in the Brown Library, at Providence, there is a modern folio MS. by D. B. de Merian, entitled Historia D. N.

[^13]J. C. in Ling $u \hat{a}$ Pacas $\hat{a}$. It contains the original and an interlinear translation in Latin. I quote the following passage as an example :

Text in the Pacasa Dialect of the Aymara Language.

(From the Historia D. N. J. C. in Linguê Pacasâ, diocesis urbis de la Puz. Descripsit D. B. de Meriun. MS. folio.)

## IX.

## AFFINITIES OF SOUTH AND NORTH AMERICAN LANGUAGES.

The first scientific attempt to show a connection between South and North American languages was that read by Dr. Max Uhle before the Congrés des Américanistes at Berlin in 1888, and published in the Comple Rendu of that association. It was confined to demonstrating a relationship between the Chibcha dialects of northwestern South America to the Costa Rican dialects, which have been so fruitfully studied by Gabb and Thiel.*

[^14]Still more recently an effort has been made by Dr. A. Ernst, of Caracas, to establish a linguistic connection between the dialects of the Timote stock, who occupy the Cordillera in the district of Mérida ( $8^{\circ} \mathrm{N}$. lat.), and the Costa Rican dialects, thus bringing the Timotes into the Chibcha stock, as he expressly claims. He goes yet further and seeks to discover verbal identities between the Timote and the Guatuso, spoken in Nicaragua on the Rio Frio. The latter is not supposed to be related to the Costa Rican dialects, which makes Dr. Ernst's theory the more important could it be substantiated. He has published a list of forty-five words in an article in the Boletin del Ministerio de Obras Puiblicas for April 8, 189I (Caracas, Venezuela), on which he bases his claim. I translate and arrange these words, and shall examine the alleged analogies.

Supposed Affinities between Timote, Costa Rican and. Guatuso Words.

| Tmote Stock. |  | Costa Rican Stock. | Guatuso. |
| :---: | :---: | :---: | :---: |
| Man, | caac, | caga, caca (father). |  |
| Woman, | cursum, | ra cur, | curiza (female). |
| Wife, | carigura, |  | curijuri (woman). |
| Mother, | shugue, |  | shu. |
| Man, white, | ticep, | suát, | otshapa (señor). |
| Woman, white, | ticiura, | soóra. |  |
| Child, | timúa, | istamura (little). |  |
| Boy, | sari, | hara, tshaasoroj, | araptshaura. |
| Brother, | cushis, | ayi, tshi. |  |
| Head, | kitsham, | kotshen (a point). |  |
| Mouth, | macabó, |  | macokica. |
| Tongue, | shikicu, | Kerkuo. |  |
| Foot, | сији́, | bukurí. |  |
| Fire, | shirup, | yuc, iyuc, tshicra. |  |
| Water, | shimpue, | divua (a torrent). |  |
| Stone, | tituup, | i-uihu-wah, | capi (hard). |
| Wood, | tisep, | dshi-shiba. |  |
| Salt, | shapi, | tshcba (pepper). |  |
| Meat, | shoroc, | susturic (deer). |  |
| Flesh, |  |  |  |
| Skin, | mishou, |  | maiza. |
| Animel, | ticagüai, | oguá. |  |
| Dog, | tisirki, | shiti. |  |
| Snake, | sui, | shuah. |  |
| Flea, | ikls, | shiike. |  |

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Timote Stock.
Scorpion, Hawk, Egg, Pepper, Maize, Bread, Town,

Night, Thief, Morning, When, Sweet, To gn, It rains, One, Two,
ikiyut, kué, shicapo, sicas, shipyac, suridipa, mизiрис,
kisi. shisnugui, sik, pena, shiboh, guateque, oki moi, cari, ca-bó,

Costa Rican Stock.
Guatuso. iküh.
cup, icup shiboh, tsheba. cupac (cornfield). $i p$ (maize).
coc (place), susi (to dwell), nicona puca (to live).
shki.
nruoëh.
seék.
ping.
buiuk.
ta toeh (I go).
tshoki.
krará.
buik.

On looking over this list it is obvious that the Guatuso affinities are too slight to justify the assumption of a relationship. The syllable cur in the words for woman, and shu for mother, are the only elements that offer a real similarity, and this is too scanty a supply to work on.

In the Costa Rican analogies the sense is often too remote. It is scarcely fair to consider "father" and "man" as identical ideas ; or "child" and "little;" " head " and " point;" " meat" and "deer;" "salt" and "pepper;" "maize" and "cornfield," etc. Selecting words so asunder in meaning and chonsing, from several dialects on both sides, apparent analogies cạn always be found. Other words present, in fact, no resemblance, as sudt to licep, divua to shimpue, $i$-ulu-walh to tituup, etc. There remain a few actual similarities which may be linguistic identities; but these should probably be explained by the fact that the Timote tribes lived near those of Chibcha lineage, and doubtless borrowed from them a number of terms. Such loan words are found in the tongues of all nations who reside in close proximity for a few generations.

I conclude, therefore, that the Timote must still be regarded as an independent stock, and its connection with any in North America has not yet been demonstrated.

Un crossing the mountain chain which separates Costa Rica
from Nicaragua, we enter a territory which was at the discovery occupied by nations whose traditions and linguistic affinities pointed to the higher latitudes of North America. Such was the Naluatl tribe, who occupied the islands and southern shores of Lake Nicaragua, and the Mangues, who peopled the borders of Lake Managua.

The latter were closely related to the Chapanecs of Chiapas, speaking the same tongue with slight dialectic variations. One band of the Mangues, about four hundred in number, was found by the early explorers among the Guaymis, one of the Costa Rican tribes whose language has marked affinities to the Chibcha idioms of New Granada. The close relations thus established between the two stocks reappear in the Mazatec language, spoken in the district of Teutitlan del Camino, State of Oaxaca.

Availing myself of a MS. vocabulary of this language, furnished me by M. A. Pinart, I have shown that it is essentially a Chapanecan dialect, but with a strong infusion of Costa Rican, and especially Guaymi, elements, and presents the most northern example of the influence of South American upon North American languages.* The following examples will illustrate the similarity :

|  | Mazatec. | Costa Rican. |
| :--- | :--- | :--- |
| Sun, | sui, | chui or sua. |
| Moon, | sa, | só, sie (or za). |
| Ear, | schical, | quhyca, sehuke. |
| Eye, | schcu, | s'ócoo, ócua. |
| Hair, | coshé, | schá, quyhé. |
| Man, | chi, | he-chi-che. |
| Woman, | chu, | sue, güi. |
| Rain, | tzi, | siu. |
| Sea, | dachicu, | dechequ-ın. |
| Foot, | tzoco, | tsuku. |
| Head, | tku, | oohua. |
| Nose, | nito, | nido- $\tilde{n}$. |

The Mazatecs were a people of considerable culture, celebrated for their religious fervor, and for the important temples and sanctuaries established in their country, prominent remains of which still exist.

[^15]X.

## ON THE DIALECTS OF THE BETOYAS AND TUCANOS.

The most recent writer on the Tucanos of the Rio Negro and Upper Amazon, Dr. Franz Pfaff, observes: "Ueber die Stammesverwandtschaft der Tucanos kann mit einiger Sicherheit nichts behauptet werden." * Von Martius believed them a horde of the Tapuya (Gees, Botocudo) stock; $\dagger$ but their language betrays no such relationship except in a few, doubtless borrowed, words. They are equally far from the great Tupi, Arawack and Carib stocks. But I believe I can show by conclusive evidence that this hitherto unidentified people speak a language akin to that of the Betoyas and Tamas, whose home is located on the eastern slope of the Cordillera, between the head waters of the rivers Apure and Meta.

My further stadies of the Betoya dialects have resulted in discovering for them a much wider extension than I assigned in The American Race. They can be traced through about ten degrees of latitude (from $3^{\circ}$ South latitude northeastward to $7^{\circ}$ North latitude) in a large number of tribes resident on the rivers Napo, Putumayo, Caqueta, Uaupes, Negro, Meta and Apure. The affinities of many of these tribes are asserted by the early missionaries, whose testimony on such points was based on a study of the languages. One of the most useful of these sources is the Noticias Autenticas del Famoso Rio Marañon, composed by an anonymous Jesuit missionary, and recently published for the first time under the competent editorship of Jimenez de la Espada by the Geographical Society of Madrid.

Another Jesuit, Father Padilla, in a letter to the Abbé Hervas, stated from personal knowledge that the Siraras, Eles, Airicos and Situjas all speak dialects of Betoya; while Gumilla names as other dialects the Luculia, Jabua, Arauca (probably for Airica), Quilifay, Anabali, Lalaca and Atabaca.

The town Betoye itself is situated on a small affuent of the Casanare, in $6^{\circ}$ North latitude, at the foot of the mountain chain known as the "Paramo de Chisga," inhabited by a wild tribe of unknown affinities, the Chitareros.

The anonymons writer already referred to states that in 1730 the Jesuits had seven "reductions" among the Icaguates (Piojes) of

[^16]the Napo, and their missions extended north to the banks of the Putumayo, on which stream were the Amaguages and the Ocoguages. Below the latter, and occupying most of the district between the middle Putumayo on the north and the lower Napo and Amazon on the south, were a number of tribes collectively called Zeonas (Seones), comprising the Cungies, Parianas, Cenceguages and others. These spoke a tongue allied to that of the Icahuates (Piojes); while "the Neguas, Seizos, Tamas, Acunejos and Atuaras are all of one tongue." The editor, Jimenez de la Espada, speaking from personal knowledge gained on the spot, identifies the modern Piojes with the Encabellados of the Spanish writers and the Icaguates of the Jesuits.

It is greatly to be regretted that the ample material existing in manuscript for the study of the Zeona language has not been made accessible. Col. Joaquin Acosta had in his library a Diccionario y Doctrina en lengua Zeona of 416 pages and another MS. of 116 pages. He expected to present them to the public library of Bogota, but I have not been able to ascertain whether they are there.

From these materials I present the following list of tribes who should be classed in this linguistic family:

## The Betoya Linguistic Stock.

## Acancios, a branch of the Tamas.

Aguaricos, a branch of the Tamas.
Airicos (Ayricos), adjoin Betoyes to the south.
Amaguages, on upper Caqueta.
Anibalis, on Rio Apure.
Atuaras, a branch of the Tumas.
Avijiras, on Rio Napo.
Becuaries, a branch of the Icaguates.
Betoyes, on and near R. Casanare.
Cenceguages, on upper Putumayo south of the Corregnages.
Ceonas $=$ Zeonas.
Cobeus, north of the Tucanos.
Correguages, on head waters of Caqueta and Putumayo.
Cungies (Kemgeioios), on R. Cungies, a branch of R. Putumayo.
Curetus (Coretus), west of the Tucanos.
Dací $=$ Tucanos.
Eles, north of Betoyes, on Rio Casanare.
Encabellados $=$ Piojes.
Icahuates (Icaguates, Icaguages), former name of Piojes.
Jamas, on Rio Manacacia.
Jaunas, near River Uauper.

Jupuas, on Rio Apaporis.
Lolacos, a branch of the Betoyas.
Macaguages, on Rios Caucaya, Mecaya and Sensella.
Magueias, a branch of the Icahuates.
Malifilitos, a branch of the Betoyas.
Neguas, a branch of the Tamas.
Ocoguages, on R. Putumayo, near R. Pineya.
Pararies, a branch of the Zeonas.
Payaguas, a branch of the Icahuates.
Pequeyas, a branch of the Piojes.
Piojes, on Rios Putumayo, Napo and Cocaya.
Pouzevaries, a branch of the Icahuates.
Quiiifayes, on Rio Apure.
Seizos, a branch of the I'amas.
Seones = Zeonas.
Situfas (or Situjas), on Rio Casanare.
Tamas, on Rio Yari and R. Cagua.
Tucanos, on the Rio Uaupes.
Caupes, on R. Uaupes.
Yupuas, a branch of the Piojes.
Yehebos, a branch of the Icaluates.
Yetes, a branch of the Piojes.
Zenseies, a branch of the Zeonas.
Zeonas, between lower Napo and Patumayo rivers.
Several of these names are synonyms, or merely the same word with varying orthography. The specific termination of nomina gentilia in the Betoya dialects would seem to be guage, which is perhaps the guce, house, household, people, of the Correguage. Thus, Oco-guage = water people, this tribe, according to Markham, being remarkably skillful canoemen. Yete is the Corr. for "hands." "Pioje" is the negative "no," with which these natives reply to all inquiries addressed them by travelers. Other of the names belong to the Lingoa Geral ; as, Payagrua $=$ enemies ; Pararic (parauara), parti-colored, i. e., painted men; Atuara $=$ the basket (making) men; Jupua in the Jauna dialect means "tree" or "wood" men, while Jauna means, in the lingoa geral, "watermen." Dace is the name of the Toucan bird in the Tucano dialect. "Curetu" in the lingoa geral is an opprobrious epithet, "rascals." It was applied to several tribes. Balbi, in his Atlas Ethnographique, gives a short vocabulary of one of these "rascal" tribes, who lived at liga on the Amazon. It has no connection with the Curetu of the Rio Apaporis.

The Jupua and Curetu dialects are properly one and the same, the difference which appears in their vocabularies arising simply from inequality in the ears and the orthographies of observers. This is evident by the following comparison of the vocabularies of Martius (German orthography) and Wallace (English orthography):

|  | Jupua (Martics). | Curetu (Wallace). |
| :--- | :--- | :--- |
| Blood, | thili, | dü. |
| Bow, | patopai, | patueipei. |
| Earth, | thittu, | ditta. |
| Flesh, | gu'hi', | se'hea'. |
| Finger, | moh-asuing, | mu-etshu. |
| Fire, | pieri, | piure. |
| Flower, | pagari, | bagaria. |
| Foot, | göaphe, | giapa. |
| Hair, | poa, | plioa. |
| IIand, | moho, | mulu. |
| IIead, | co'ëre, | cuilri. |
| House, | wu'i, | voee. |
| Mouth, | thischülh, | dishi. |
| Sun, | hauvä, | aoué. |
| Tongue, | toro, | dolo. |
| Tooth, | gobäckea', | gophpecuh. |
| Water, | thäco, | deco. |
| Woman, | nomöa, | nomi. |
|  |  |  |

These two, the Jupua and Curetu, together with the Jauna and Cobeu, form with the Tucano a group of dialects closely related anong themselves; and they are a branch of the same muther tongue as the Betoya, Tama, Pioje and Correguage, which, in turn, present also merely dialectic differences between each other.*

In spite of the imperfect materials yet available to study this extended family, the relationship of its scattered members is demonstrable. To illustrate it, I submit the following:

## Comparative Vocabulary of the Betoya and Tucano Dialectic Groups.

Betoya Group: 13. = Betoi ; C. $=$ Correguage ; P. $=$ Pioje ; T. $=$ Tama. Tueano Group: Cob. $=$ Cobeu; Cur. $=$ Curetu; Jup. $=$ Jupua ; Tuc. $=$ Tucano.

[^17]Man,
Woman,
Fire,
Water,
Rain,
Tongue,
Hand,
Foot,
Teeth,
Nose,
Forehead,
Breast (mamma),
Meat,
Maize,
Jaguar,
Parrot,
Deer,
Egg,
Fowl,
Monkey,
Stone,
Star,
Banana,
Son,
Sky,
Canoe,
Devil,
Enemy, Farcwell,
umasoi, B. ; emiud, C.; euma, imea, Tuc.; ermeu, Cob., Cur.
domi, C.; romeo, T.; nomi, Cur.; nomio, Tuc.
to'a, P., T.; fu-tui, B.; toua, Cob.
oco, B., C., P., T.; oco, Tuc.; hóggoa, Jup.
oco-raime, C.;
chimenu, P.;
r'umocoso (my hand),
coapi, C.;
cojini, C.;
jinkepiu (thy), C.;
siapue, C.; jорие, T.;
ozecho, C.;
guai, C.;
huka, P.;
ia'i, P.; chai, C.;
gueco, C.;
ñama, C.;
tsia, C.;
cura, C.;
tangue, C.;
cata, C.;
manioco, C.;
ohoh. P., C.;
sii, C.;
quen-eme, C.;
choque, C.;
gualò, C.;
pai-name, C.;
sayé, P.;
oco-ro, Tuc.
chemeno, Tuc.; crimendo, Cob.
umoca, Tuc.
göaplıae, Jup. ; giapa, Cur.
coping, Cob.
enkenha, Tuc.
dipua, righpoah (head), Tuc.
o\%-penno, Tuc.
ga'hi, Jup.
o-hoka, Tuc.
jik, Jup.
wèki, Tuc.
ikama, Jup.
dia, Cur.
caru-hin, Cob.
ayke, Tuc.
ixtana (二i.cato-na), Tuc. jocheo', Jup.; ambiocova, Cor.; ua'coa, Tuc.
ohoh, Tuc.
si-mugi, Cur.
imina, J.; imi-se, Tuc.
yuki, Tuc.
ouatin, Tuc.
ua-paí, Tuc.
uîyé, Tuc.

In other words, although the identity of the radicals exists, it is not visible in the forms presented. Thus, in Wallace's vocabulary both "sun" and "moon" are rendered by wipo, which is the Betoya ubo, sky, heaven.

Domi, nomio, "woman," is really a compound of the Betoya feminine ro, female, and emi, or uma, "man" (homo), as is easily seen in the 'rama ro-meo.

Very few analogies are visible to the Tapuya (Ges) dialects, to which the Tucano has usually been assigned. The only one of importance is the word for fire, pekhimi (Tuc.), piätgiz (Jama), which appears to be the Botocudo pïk.

The conception of number is very slightly developed in this stock, and even the dialects most closely related show wide variations; for example:

Betoya. Tama.
1, edoyoyoi,
2, edoi,
3, ibutu,
4, ibutu-edoyoyoi $(3+1)$,
5, rи-mocoso (hand),
teyo, ca'yapa, cho-teyo $(2+1)$, ca'yapa-rix (2 again), cia-jente (hand),

Pioje. moño (finger). tsamun-cua. tsamun-7uente-cua. tajeseca. teserapin.

In the vocabularies both moko and jente (jete) are given for hand, and both are used in the words for "five."

In the Tucano group the dialect which has retained the strongest affinities is the Curetu:

Curetu

| One, | tchudyu $(=$ Betoya ĕdyuyu). |
| :--- | :--- |
| Two, | ap-adyu $(=$ ĕdyu). |
| Three, | arayu. |
| Four, | apaedyái $(=2+2)$. |
| Five, | tchumupa. |

I believe the evidence here briefly presented will be adequate to prove the extended affinities of this stock, and to vindicate its importance in South American ethnography. How far its analogies may be traced north and west I have not sufficient materials to determine. In The American Race, p. 275, I pointed out a few similarities between Betoya and Choco roots; and I would particularly mention that the words for "man" and "woman," $u m a$ and ira, reported by early explorers (in 1515) as in use along the northern shore of Venezuela and the Isthmus of Panama, certainly belong to the Betoya language.*

[^18]
[^0]:    *The American Race: A Linguistic Classifcation and Ethnographic Description of the Native Tribes of North and South America. By Daniel G. Brinton. 1 vol., 8vo, pp. 392 (N. D. C. Hodges, New York, 1891).

[^1]:    - See D'Orhigny; Li'Jlomme Amerioaln, Vol. 1, p. 37小: Deserip. de las Jisiones det alto Peru (1771).
    fils report was prluted ln full In Melendez, Tesoro Verdadera de las Indias, Tomo in.

[^2]:    *E. Heath in Kansas City Review, April, 1883; Col. Labré in Proc. Roy. Geog. Soc., 1889 ; Nic. Armentia, Explor. del Lfadre de Dios.

[^3]:    * "Aujour d'hui le type caucasique y domine," says Father Joseph M. Magalli, in L'Année Dominicaine, Paris, $18 \$ 8$.

[^4]:    - Hes maya Finther Magnill, nixove quoted, bit the knowledge of this writer falls fur shomt of what in requinte when he adide of the Jlvaros and Japaros, "Ils parlent tous in mene langue, 10 Qutchua " (?).

[^5]:    - Bee my Amerlean Race, pr. 2ss.

[^6]:    - "Fin Aten me hablan In leca por ser esto Pueblo do Iudlos Lecos." Descripcion de las Mblones itel Alto I'ru, 1771.

[^7]:    - Tho writem of tho Micalon siventifique an Qup Iforn denenfy the Onas with the Fiakameelinty, and weert that thay apenk a clowely related dinfect of l'atagonim.
    + E iffinme Amerialinn, Toutu II, p. 7 l .
    : Informe of Iton (irronima I'letan, 17:9, quoted by Dr. Darnpsky in the 1sull. del Instifide Dengrajuhico Árgentlno, Tomo x, 13. 278.

[^8]:    *A. Gpinnard, Three Years among the Patagonians, p. 49 et al. (Eng. trans., London, 1871). The prayer he inserts in some dialeet not clearly stated on p. 163 is almost pure Arauennian, as are the numerals on p. 261. It is doubtful if he was ever among the true l'atagonians (the Tehuelhet).

[^9]:    * See authorities quoted in my work, The American Race, pp. 319 seq.
    † Reisen in Süd-Amerika, Vol. v, p. 81 ; Organismus der Khetsua-Sprache, p. 71.
    $\ddagger$ Ameghino, quoted by Ihering.
    \& In Das Ausland, 1891, p. 914.
    \|" Nutes in the Calchaqui Region," in the American Anthropologist, October, 1891, p. 35 S .

[^10]:    - Mrzama'n letior in printod In tho Fractones Cicografcas ile Inilias, Perit, Tumo il (Madrlis, INES).

[^11]:    * An Arte, printed at Lima in 1753, of this dialect, is mentioned by Ludewig, Lit. of Amer. Aborig. Lang8., p. 162.
    $\dagger$ Organismus der Ǩetchua Sprache, Einleitung, p. 65.
    $\ddagger$ See the Introduction to his work, Das Runa Simi oder der Keshua-Sprache (Lelpzig, 1890).

[^12]:    - Von Tachull, Organismus der Khelaur-Sprache, Elnleltung, s, 65. Whhelm vou 11 .umbolltt was the tIrst to didentify the words adduced by Garellasso ns members of the Keclun.
    f(inntav Brahll, Dle Cullurvüker All-Amerlkas (Clncinnatl, 188\%).
    \& " Dan permanmelse V'erwandiselinfssystem und dle Geschlechisverbinde der Inka," In Tha dualand, 1401. As to the "secret Inngunge," Cunow sinys, after discusshing whit worls of It we flad In Cincellamo-" Man sleht, von clner Geheimsjrache kinn kelae Rede melu."
    
    
    
    

[^13]:    *Dr. E. W. Middendorf, Die Aymard-Sprache, Einleitung (Leipzig, 1891).

[^14]:    - Il havenummarized the evtelence in The American Racc, pp. 181-186. I do not over-
    
     sion Central. unt 8ud-dmerlkn:" but If doen not tako up the subject In a selentfie mannot, amb honed te resulte are unsutinflity.

[^15]:    * See a paper by me in the Proccedings of the American Philosophical Society, January 1892, entitled "The Mazatec Language and its Affinities."

[^16]:    - Ierhavillangen der Ikerliner Grearl. für Anthrop., ete., 1840, s. CU3.
    $\uparrow$ Gilomearla Langwarum Aradllenofum, b. 283.

[^17]:    * Dr. Pfaff (u. s. p. 603) has compared five words of the Tucano, Coretu and Cobeu, presenting similarities; and Dr. Ernst (Zeitschrift für Eyhnol., 1891) has shown similarities of six words in Tamas and Tucano; but a general survey of the stock has not heretofore been offered.

[^18]:    * "En toda esta tierra llaman a los hombres omes, y a las mugeres iras." See J. Acosta, Historia de Nueva Granada, p. 453. The tract referred to is from the Gulf of Uraba to the Punto del Nombre de Dios, along the shore of the Isthmus of Panama.

